

Do Green Spaces Have an
Effect on Social Capital within Communities?

By: Tanner DeWolf

What is an urban green space and how can it help your community? Urban green spaces can come in many different shapes and sizes. They can include large areas like parks, golf courses, and zoos all the way down to vacant lots, medians on side streets, and even planters hanging off of a window in an alleyway. Broadly defined, an urban green space is any piece of publicly or privately owned land that can be cultivated, provide natural aesthetic value, or offset natural or unnatural processes such as extensive urban runoff and carbon-monoxide emissions. For my purposes I broke down urban green spaces into the following categories: state parks, gardens, lawns, city parks, greenways, green roofs, and green streets.

Having these urban green spaces can help a community in a number of different ways. You could turn some of the urban green spaces into publicly owned and operated urban gardens which can be used to provide food for local community members and provide jobs and some revenue for the community. “Sustainable landscaping and gardening saves money. Simply by planting trees and using alternative ground cover to sod, citizens and municipalities can enjoy lower water, energy, and maintenance costs.” (Roseland 2005) Some businesses are even incorporating garden in to the work place now. A number of corporations are providing “corporate gardens”, such as Fireman’s Fund Amex Life Assurance Company in Main County CA, Hewlett Packard Headquarters in Palo Alto CA, MITRE Corporation in Bedford, MA, and Readers Digest Headquarters in Pleasantville, NY. (Francis) There aren’t any long term studies yet, but

the Vice President of Readers Digest says the employees seem to be more satisfied at work. (Francis)

Urban green spaces can also provide some health benefits to the community members. In a past study it was found “that physical inactivity causes 1.9 million deaths globally each year.” (Hillsdon, Panter, Foster, Jones 2006) Having more green spaces fosters physical activity, especially when the green spaces are closer to community members. Along with physical health mental health can be affected by poor environment conditions. In a study by Guite, Clark, and Ackrill published in the Journal of the Royal Institute of Public Health the authors found “several elements of the physical environment are believed to be linked to poor mental well-being, such as high rise living, graffiti, damp and noise exposure.” People are happier when their physical surroundings are kept in good shape, are accessible, and are in a crime free area.

There may already be parks in your area, but just by going through and planting more vegetation and making connecting paths between other parks (greenways) can raise the aesthetic value of the area. Also by connecting and maintaining parks and other urban green spaces you make it possible for local ecosystems to remain intact, and make it possible for wildlife to migrate to appropriate habitats. There are a couple of good examples of projects like this; one is the Emerald Necklace in Boston Massachusetts. The Emerald Necklace was created in 1887 by a man named Frederick Law Olmsted, one of the oldest systems of linked parks Olmsted’s Emerald Necklace connected 9 major parks in the Boston area. Due to the Emerald Necklace there are a variety of animals living within the city that normally urban dwellers would not have the pleasure of seeing. Also the chain of parks provided a large area of water storage that acts as a flood

prevention method. (Benedict, Edward 2006) Another example of how connecting green spaces can benefit the ecosystem is a project that was undertaken in Florida. Multiple organizations got together with the objective of keeping ecosystems connected throughout the whole state of Florida and “facilitate the ability of ecosystems and land scopes to function as dynamic systems, and maintain the evolutionary potential of the components of the ecosystem to adapt to future change.” They accomplished this creating a system of “...state wide ecological and recreational/cultural networks.” Once finished the network made up what is referred to as the Florida Greenways System. (Benedict, Edwards 2006)

Some additional benefits of green spaces in your community are a decrease in energy costs. Properly planted trees by the city can increase shade, wind-breaks, and evapotranspiration which can save residents 20 to 20% in energy cost. (Roseland 2005) Properly functioning green spaces can also reduce something called the urban heat island effect. This is when all of the concrete and pavement in a city absorbs and radiates heat increasing the temperature by at two degrees; plants metabolize the solar energy and help to reduce the effects. (Roseland 2005) By planting indigenous plants you can improve water usage and Improve drainage over all with the addition of plants. We have already covered how green spaces can improve urban wildlife, but the green spaces can also act as a “sink for various pollutants in the atmosphere. Overall green spaces can “enhance our connection with ecological processes. (Roseland 2005)

Most importantly through creating these urban green spaces you develop more social capital in an area. Social capital is “... a collective asset that grants members “social” credits that can be used as capital to facilitate purposive action.” (Glover 2004)

In other words social capital is this idea of bringing a community together and improving the cohesion of all people in the community. Improving this social capital can increase trust among community members and reduce fear and class separation of people.

“Socializing in these spaces is important in promoting the mixing of all kinds of urban citizens: it reduces conflicts, avoidance behavior, ignorance and segregation.” (Seeland, Dubendorfer, Hansmann 2008) These ideas of consecutiveness to your community are especially important to teach children how to interact: “...youths must meet their peers in surroundings that are accessible to members of all communities, without formal, financial, or symbolic restrictions.” (Seeland, Dubendorfer, Hansmann 2008)

Adolescents are restricted most of the time to the areas close to them so having these areas for them to use and being able to interact with others is important to their social development. (Makinen, Tyrvaainen, 2008)

Troy D. Glover preformed a series of interviews in his paper *Social Capital in the Lived Experiences of Community Gardeners* where he documented the building of social capital. There was a “core group of community members” that formed a group he refers to as the Old town Neighborhood Association that was worried about crime in their community. They found that the community garden project brought people together in a way that they could “socialize and achieve other aims too (i.e. combat crime).” Glover also found through his interviews that as people were socializing they were starting for greater bonds of trust between community members. Glover did find what can be a very detrimental consequence of a core group starting an initiative which is the perceived alienation of certain groups of people in the community. It turns out that a majority of the African Americans in the neighborhood felt that they were not part of this community

building mantra or wanted to support community efforts just not the ones that were being presented to them. This is why it is important to see communities as a collective, you can have your core group to help implement decisions, but you should never alienate groups of the community. (Stoecker 2005) In the end though projects like these usually promote interaction among community members that extend past the project itself and help to build social capital in a community. (Glover 2004)

I chose several urban green spaces in the city of Binghamton, NY to focus my research around and see if people in the surrounding areas have a connection with, appreciate the natural environment around them, and if they even used the areas at all. I also wanted to identify if people that were closer to one of these green spaces frequented it more than people who were farther away and what could be done to improve the quality of the area so it would provide the greatest benefit to the community members.

I want to give just a brief history on the green spaces I chose. The first area I chose is called Recreation Park located on the West Side of Binghamton. (Number 26 on map) The property used to be farm land that was owned by a man named Able Bennett and was then purchased and gifted to the city of Binghamton by George F. Johnson (the owner of Endicott-Johnson Shoe Corp.) in October of 1921. The only stipulation Johnson had, was that the area remain a community park or be returned to his estate. The key features of the park are a Herschell carousel, added in 1925, the bandstand, and an oak grove. The park was nearly lost until recent efforts spanning from the mid 1980's until the present revitalized the park. (<http://westsidebinghamton.org/recpark.html>) In the west side of Binghamton there is a community group that goes by the West Side

Neighborhood Association that is active in the community as far as beatification of the area and up keep of places like Recreation Park.

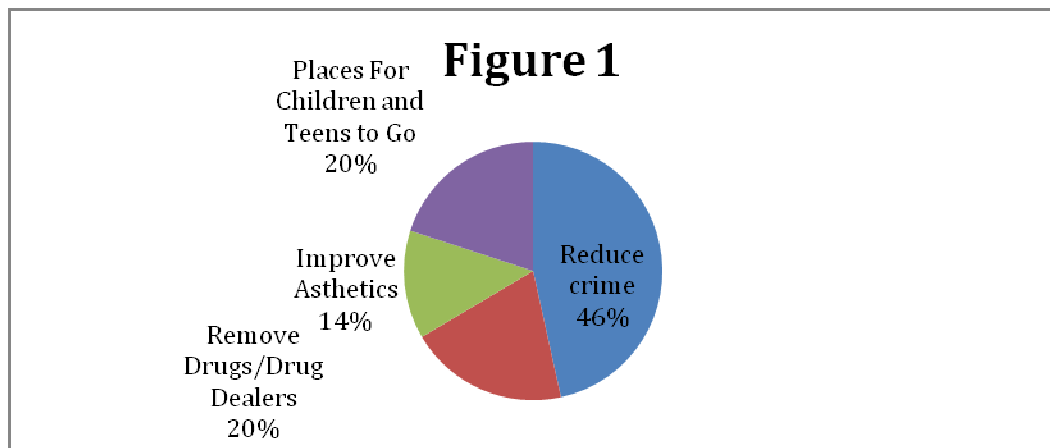
The next area I pick is called Ross Park Zoo. (Number 10 on map) This is a 90 acre plot of land that was donated by a wealthy business man named Ross sometime in the 1880's. At one point the zoo nearly was closed by the USDA for poor care and facilities due to underfunding. In 1966 the Southern Tier Zoological Society was created out of concern for the zoo, and in 1972 the 1st appropriation for zoo maintenance appeared in the city of Binghamton's budget. The Society granted a contract by Binghamton to oversee the zoo in 1977 and the Zoo is still running today.

(rossparkzoo.com) I also chose some an area that is part of the Broome County Veterans Memorial Arena. The Arena was opened in 1973 and is owned and operated by the Broome County Department of Parks and Recreation. Located downtown of State Street it is the entertainment center of Binghamton. (www.gobroomecounty.com/arena)

The last two sights I picked have been relatively unchanged over a 70 year span. First is Ely Park (number 48 on map), once either wooded area or used as farm land it was developed into a golf course in 1933 and designed by Ernie Smith. (<http://www.cityofbinghamton.com/departments.asp?zone=dept-parks-recreation>) Next is an area called the Southside Park that was once a canal but was filled in and converted to a park after being acquired by the city of Binghamton. It is also home to the Copper Beach Tree.

I surveyed community members in relevant areas to the green spaces I was looking at to see what they thought of the state of their community and how they viewed

the green spaces they had access to. In most neighborhoods I found a large disconnect of community members with each other. Crime rates in the area and a negative perception of the type of people walking the streets was one of the big factors for people not wanting to be out at these green spaces. When asked “is there anything you would change about your neighborhood” (question 22 on the survey) 46% said they wanted to reduce crime and 20% wanted to remove the presence of drugs and drug dealers. (Figure 1)

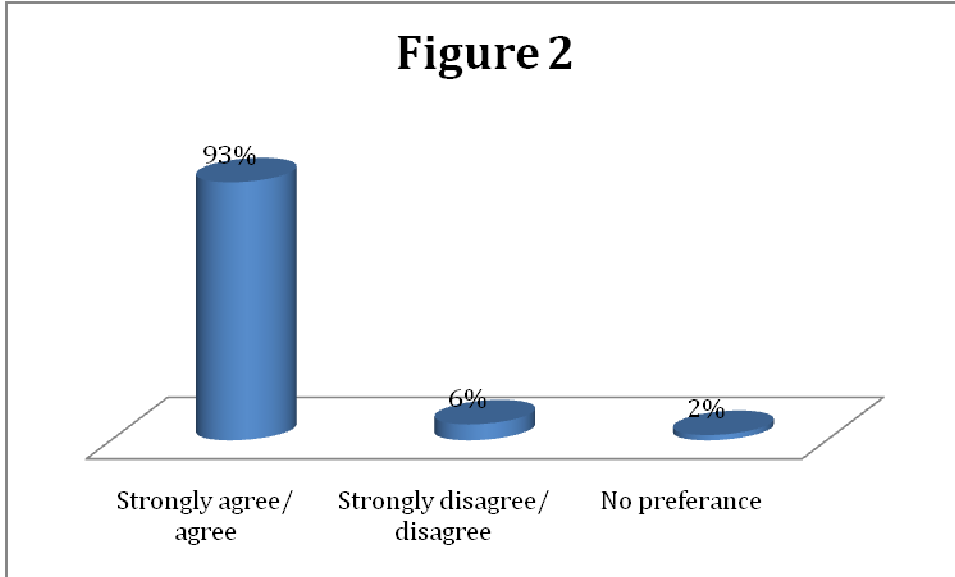


Many of the residents felt almost isolated and lived in their own little world not knowing that two houses down from them were people who felt the same way. Even worse was the fact that of the residents who had been in the area for a long time told me how connected to their neighbors they used to be. As the years went by and new people moved into neighborhoods and residents did not try and keep these relationships going for a variety of reasons. I noticed a lot of the time the disconnect was with older community members that at one time had children and interacted with their neighbors, but as the kids grew up and moved away the residents had no reason to go outside and interact with other people anymore. The older residents also saw younger families

moving in and even college students and didn't feel connected with them. There is no outreach on the part of the new neighbors and students to help this. This disconnect was made even more clear by the results from questions four and six from the survey.

Question four asked residents if "people around here are willing to help their neighbors" and gave them a scale from 1-5 1 being strongly disagree, 5 being strongly agree, and 3 meaning neither. When 60 peoples answers were averaged the average was 3. Using the same scale the same result was obtained for question six which stated "people in this neighborhood do not share the same values." Even a negative result from those two questions would of shown that everyone in the neighborhood felt the same way, but these results further demonstrate the disconnect between community members.

Due to the lack of social capital people felt isolated in their own community but were optimistic about ideas of community gardens and renovations of parks. When community members were asked if they felt a community garden was a good thing for a community to have almost 100% either agreed or strongly agreed. (Figure 2)

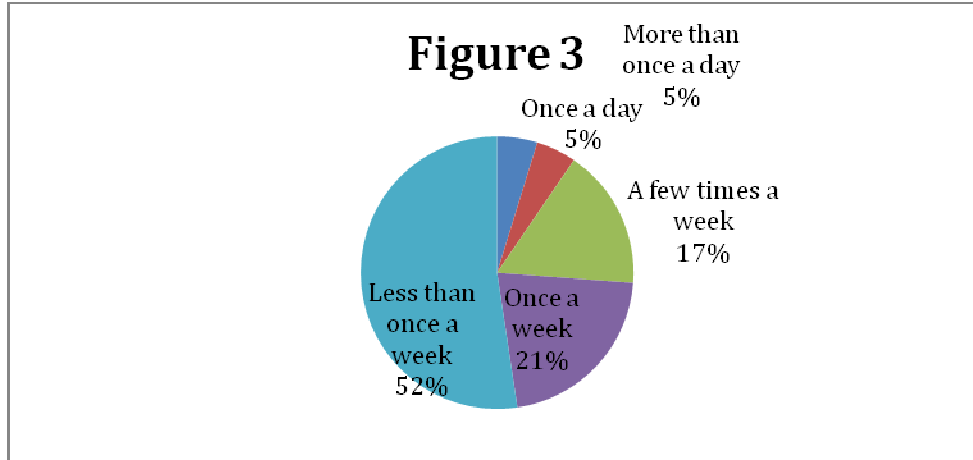


Hopefully if

some of these green spaces could be implemented then people would be able to interact more and realize that their cohesion with each other would go a long way in giving them a large enough voice to combat the crime in their neighborhoods and make them feel like part of a community.

There were a couple surprising results that were found when people were asked about what green spaces were in their community and which if any they frequented. First most people didn't even understand what the term green space meant, and for those that thought they understood the term they didn't understand it fully; only listing things like parks and playing fields. Most people knew where green spaces were located but surprisingly not many went to them. In fact only over half of the people surveyed went less than once a week to greenspaces that in some cases were no more than a block from

home. (Figure 3)

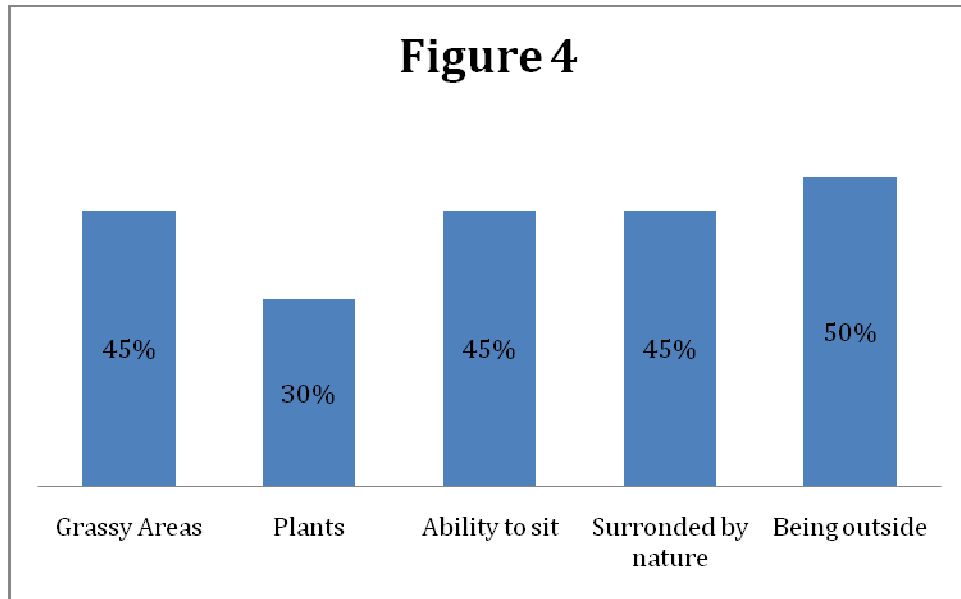


People with children seemed to be the ones that would frequent the parks and fields the most, but many said they would go more if there was more interactive objects for their children to play with. All the people surveyed tended to drive farther to areas outside of their community so they could go to an area that they felt was more appealing, safer, and better maintained rather than staying at parks in the community. Of the people that didn't go to the green areas there were a couple of consistent reasons. One was age; people in their fifties, sixties, and older preferred to go in their backyards or sit on their front porch rather than make the walk to a green space which again in some cases was only a couple blocks away. If the older community members did go out they tended to just want to walk on the sidewalks in their immediate area and not venture too far outside their comfort zone.

There were a couple general points that most people agreed on that would make it more likely that they would visit a green area. First was the safety and appearance of an area. Many community members wanted to see more maintenance and upkeep in the areas, and hopefully that would lead to more people coming and reduce the amount of

crime or loitering in the area. Next many people didn't go because they don't like to travel so far to get to a green space. If the number of greenspaces could be increased people would end up being closer to one and be more inclined to visit them on a more frequent basis. The last reason is a problem that is outside of the scope of this paper and needs to be solved on a much grander scale than just at the community level, this is the problem of leisure time. Many residents stated that they just didn't have time to go to these places or to take their children there, between jobs and responsibilities around the house spending time in nature took a back seat.

Weather or not people liked the green areas around them, went to these places, or even knew where they were, one thing stayed constant; people enjoying being outdoors. Of all the people that were surveyed nobody hated to be outside enjoying nature, they might not of liked being outside in their neighborhood or lack the time to do so, but 50% enjoyed just being outside. (Figure 4) The people that didn't go to the parks for whatever reason still enjoyed gardening in their backyard or just sitting outside on a nice day. The people that did go to the green areas 45% were drawn towards ones that had bigger fields to play in, and 30% liked more flowers and trees to look at. (Figure 4)



Urban green spaces are more abundant, play a larger role in bringing a community together, and creating social capital than people realize. So many problems in a community can be solved by just connecting with other community members and taking a larger interest in how your community looks and operates. When you build social capital within a community you become a more powerful entity and can push for change. You can create new parks or fix old ones, police your neighborhoods better, and form a more comfortable environment that fosters cohesion and helpful attitudes. Being outside and connecting with nature not only makes you feel better it gives you a chance to connect with people and feel better about your surroundings. I hope this research presented here and this paper in general get people motivated to get back in touch with their communities.

Community Survey

Please evaluate your agreement with the following statements from 1 to 5 (1 = Very Unlikely, 3 = Neither Likely nor Unlikely, and 5 = Very Likely).

1) If children were skipping school and hanging out on a street corner, people in this neighborhood would be likely to intervene.
Very Unlikely 1 2 3 4 5 Very Likely

2) If children were showing disrespect to an adult, other adults in this neighborhood would not intervene.
Very Unlikely 1 2 3 4 5 Very Likely

3) If a fight broke out in front of someone's house, people in this neighborhood would try to stop it.
Very Unlikely 1 2 3 4 5 Very Likely

Please evaluate your agreement with the following statements from 1 to 5 (1 = Strongly Disagree and 5 = Strongly Agree).

4) People around here are willing to help their neighbors.
Strongly Disagree 1 2 3 4 5 Strongly Agree

5) People in this neighborhood generally don't get along with each other.
Strongly Disagree 1 2 3 4 5 Strongly Agree

6) People in this neighborhood do not share the same values.
Strongly Disagree 1 2 3 4 5 Strongly Agree

7) I find it difficult to access the grocery store from where I live.
Strongly Disagree 1 2 3 4 5 Strongly Agree

8) I am confident that I have access to affordable nutritious food.
Strongly Disagree 1 2 3 4 5 Strongly Agree

For the following activities, please report how often you do each according to the following scale.

- a) More than once a day
- b) Once a day
- c) A few times a week
- d) Once a week
- e) Less than once a week

- 9) How often do you eat fast food? _____
- 10) How often do you go to the grocery store? _____
- 11) How often do you eat fruit? _____
- 12) How often do you eat vegetables? _____

13) I am confident that I have a nutritious diet.
Strongly Disagree 1 2 3 4 5 Strongly Agree

14) Are there any parks, fields, community gardens, playgrounds or other “green” or planted areas near where you live? If yes, list the types and names or locations if known.

15) How often do you visit these “green” or planted areas (using above ratings)? _____

16) If you don’t use these types of areas at all is it because (Choose one or more):

- a) You think these areas are unsafe
- b) You think these areas are unappealing (ugly or not welcoming)
- c) You think these areas are a waste of space
- d) You never paid much attention to these areas
- e) These areas are not accessible enough
- f) You don’t have enough time
- g) Other _____

17) What do you like about these “green” or planted areas (Choose one or more)?

- a) The grassy areas
- b) The plants
- c) Being able to sit down
- d) Being surrounded by nature
- e) Just being outside
- f) Other _____

18) I enjoy spending time outdoors.

Strongly Disagree 1 2 3 4 5 Strongly Agree

19) I feel that a community garden is a good thing for a neighborhood to have.

Strongly Disagree 1 2 3 4 5 Strongly Agree

20) Community gardens are a waste of time.

Strongly Disagree 1 2 3 4 5 Strongly Agree

21) What would you like to see in a community garden?

22) Is there anything you would change about your neighborhood?

23) SUNY students have a significant presence in my community.

Strongly Disagree 1 2 3 4 5 Strongly Agree

24) How would you rate these interactions.

Strongly Negative 1 2 3 4 5 Strongly Positive

- 25) What is your age? _____
 If you would rather not report your exact age, please provide an age range:
 a) 20-25 b) 25-30 c) 30-35 d) 35-40
 e) 40-50 f) 50-60 g) Over 60
- 26) What is your marital status?
 a) Single (never married) b) Married c) Divorced
- 27) How many children do you have? _____ How many live with you? _____
- 28) Do any other individuals live in your house? _____ If so, how many? _____
- 29) What is the highest level of education you have achieved?
 a) Did not finish high school b) High school degree
 c) Associates or Professional degree d) Bachelor's degree
 e) Master's degree f) Doctoral degree
- 30) What is the approximate income level of your household, before taxes?
 a) Less than \$5,000 b) \$5,000-\$10,000
 c) \$10,000-\$15,000 d) \$15,000-\$20,000
 e) \$20,000-\$25,000 f) \$25,000-\$30,000
 g) \$30,000-\$40,000 h) \$40,000-\$50,000
 i) Over \$50,000
- 31) Were you born in this country? _____ If so, were you born in the Binghamton area? _____
- 32) With what ethnicity do you identify? _____
 Which of the following categories would that be a part of?
 a) Asian e) Pacific Islander
 b) Black f) Hispanic
 c) Caucasian g) None of the above
 d) Native American/Inuit
 Sex: _____ Address: _____

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