

Poverty as a Barrier to Urban Community-Based Conservation and Education

Arielle Webster

Project Dragonfly, Miami University, Oxford, OH

EE Costa Rica, Summer 2017

Introduction

One of the strengths of community-based conservation lies in its ability to bring communities together to achieve common goals, but not all communities have equal access to nor equal interest in this collaborative process. Conservation and environmental action is often inaccessible to impoverished communities (Dawson, 2012). Urban areas, where human built environments dominate and can exclude natural environments, face unique issues when it comes to community-based conservation initiatives (Dawson, 2012; Rosenwig, 2003). Social and financial factors create barriers to disenfranchised poor communities by limiting access to science and conservation educational opportunities and experiences (Dawson, 2012). Unequal access to conservation and education initiatives means that the communities' needs are not being met and the full potential of the conservation initiatives are not being reached.

80% of United States population lives in urban areas (USCB, 2014) and poverty rates vary from city to city. This paper seeks to understand the unique factors affecting the relationships between poverty and urban community-based conservation and education initiatives, in addition to identifying the strengths and weaknesses of these initiatives.

Benefits of CBC in Disenfranchised Communities

“Nature Deficit Disorder,” the idea that time in nature is required for healthy mental growth and stability, is a major issue facing communities (Louv, pg. 100). This lack of experience in nature leads to "the extinction of experience" which then causes people to lack the initiative to take action on environmental issues (Miller, 2005). Nature experiences, whether in a city park or in a forest, are positively correlated with both physical and mental health (Louv, 2005; Miller, 2005; Baur, Gomez, & Tynon, 2013). The presence of green areas, including parks, gardens, and other natural spaces, is also positively correlated in community social health and positive perceptions of communities (Baur, Gomez, & Tynon, 2013). These positive perceptions come from both within and without the community. This means that increasing access to and time spent in green spaces makes areas more desirable to live in.

Poverty as a Barrier to Science Education and Action

While the attitudes around conservation do not differ much between gender, racial, social, and economic classes (Clayton & Myers, 2009), public science, such as science museums and science centers, is often inaccessible to minorities and low-income groups (Dawson, 2014). Science pursuits are often perceived as “elite” activities that require previous knowledge, experience, time, and money, all of which can be lacking within minorities and low-income groups. If an individual did not grow up attending museums, they are less likely to take their own children (Dawson, 2014).

Knowledge about conservation issues, such as global climate change, invasive species, and pollution, does not equate to action (Clayton & Myers, 2009). Environmental experiences are a much stronger predictor for conservation action (Clayton & Myers, 2009). Science museums and centers may be able to bridge the gaps between science knowledge, experience, and action (Clayton & Myers, 2009; Dawson, 2009). However, poor people and other disenfranchised groups often feel excluded from science oriented spaces, such as museums and nature centers, due to social perceptions that science is for more elite people (Dawson, 2012). Given the perception of social exclusion from science museums and centers, minority and low income groups are much less likely to receive experiences that spur action (Dawson, 2009).

Bridging the Gap

Research indicates that there are no demographic factors taken alone that can predict how an individual may feel about environmental and conservation issues (Clayton & Myers, 2009). In general, people have positive feelings about nature and conservation, but often fail to see how their own actions connect to local environmental health (Clayton & Myers, 2009). Because of this disconnect between positive attitudes and the connection to self, a positive attitude towards nature and conservation does not lead to action (Clayton & Myers, 2009; Kudryavstev, Stedman, & Krasny, 2012). How do community-based conservation programs successfully bridge these gaps and involve communities with high rates of poverty? A key method for bridging this disconnect no matter an individual’s demographics is through providing positive, local nature experiences.

One example that has been a very successful local nature experience is building community gardens. In urban communities where housing spaces often do not provide any kind of yard or green area, a local community garden can provide outdoor experiences for a wide demographic (Guitart, Pickering, & Byrne, 2012). Gardens, along with practical training on how to grow vegetables, fruit, and other plants, can also play a vital role in addressing issues of urban “food deserts.” Many impoverished and/or disenfranchised urban communities lack a neighborhood grocer, especially one that provides affordable fresh produce. Growing one’s own food can help families access a healthier diet as well as a local nature experience.

Philadelphia’s historic Bartram’s Garden shows another active example of how programs can work to bridge the gap to provide meaningful environmental experiences and opportunities to impoverished communities (Bartram’s Garden, 2017). Located along the Schuylkill River, Bartram’s Garden encompasses approximately 45 acres of land and directly abuts an urban low-income housing development. Programs provided by the not-for-profit Bartram’s Association directly work to communicate with that community about their needs and to provide safe, free, and equitable outdoor experiences for them in the park. Programs include free kayaking, free outdoor movie nights, community gardens, free children’s educational programs, and more.

While the successes at Bartram’s Garden are admirable, many urban environmental programs do not address the needs of local impoverished or disenfranchised communities. As a result, these communities are often cut off entirely from nature-based education and experiences even when they occur geographically nearby. The limitations of CBC programs should be acknowledged so that more efforts can be made to directly reach out to local groups in need.

Limitations of CBC

Community-based conservation requires significant money, time, and long-term commitment, all of which are limited resources in low-income communities. Poverty itself is a complex issue that is hard to overcome at either the individual or community levels. Poverty restricts access to quality educational opportunities, including environmental education..

Community-based conservation initiatives can easily exacerbate existing issues caused by poverty when they fail to address the specific needs of the communities. This is especially common when conservation initiatives work from the top down or outside in, without direct input from or communication with the communities they are attempting to serve.

A common fault with urban community-based conservation initiatives is the unintended gentrification of areas that have historically been impoverished communities. Because green spaces are such a commodity in urban areas, they tend to increase the desirability of the surrounding neighborhoods (Baur, Gomez, & Tynon, 2013). This leads to the displacement of impoverished communities that cannot afford to continue living in their communities as prices of rent, food, and other necessities increases.

Community-based conservation has the potential to have far reaching impacts on the physical and mental health of individuals and community health as a whole. However, successful projects will necessitate finding new ways to directly reach out to, involve, and engage the most at-risk communities early in the planning phase.

Conclusion

One commonality in the literature of successful community-based conservation projects seems to be a broad range of communities brought together via open communication to work towards achieving common goals. To me, that says that any current or future community-based conservation projects must strive to find the communities not involved and determine the cause of their disenfranchisement with the intent to bridge those gaps. I expect that there will be a broad range of socioeconomic factors that play major roles in an individual's or community's involvement in conservation initiatives. Dangers of poorly realized urban community-based conservation projects is that they create issues of displacement in impoverished communities. The next step is to find ways to use urban community-based conservation initiatives to address the root causes of poverty, not just the results of it.

References

- Bartram's Garden (2016). Mission + Vision. Retrieved from <https://bartramsgarden.org/>.
- Baur, J. W. R., Gomez, E., & Tynon, J. F. (2013). Urban nature parks and neighborhood social health in Portland, Oregon. *Journal of Park and Recreation Administration*, 31(4), 23-44.
- Clayton, S. & Myers, G. (2009). Attitudes, values, and perceptions. In *Conservation psychology: Understanding and promoting human care for nature* (pp. 15-33). Hoboken, NJ: Wiley-Blackwell.
- Dawson, E. (2014). "Not designed for us": How science museums and science centers socially exclude low-income, minority ethnic groups. *Science Education*, 98(6), 981-1008. doi: 10.1002/sce.21133
- Guitart, D., Pickering, C., Byrne, J. (2012). Past results and future directions in urban community gardens research. *Urban Forestry & Urban Greening*, 11(4), 364-373. doi: <https://doi.org/10.1016/j.ufug.2012.06.007>
- Kudryavstev, A., Stedman, R.C., & Krasny, M.E. (2012). Sense of place in environmental education. *Environmental Education Research*, 18(2), 229-250.
- Louv, R. (2008). *Last child in the woods: Saving our children from Nature-Deficit Disorder*. New York: Algonquin Books.
- Miller, J. (2005). Biodiversity conservation and the extinction of experience. *Trends in Ecology & Evolution*, 20(8), 430-434.
- Miller, J. (2005). Restoration, reconciliation, and reconnecting with nature nearby. *Biological Conservation*, 127, 356-361.
- Rosenweig, M. L. (2003). *Win-Win Ecology: How the Earth's species can survive in the midst of human enterprise*. New York: Oxford University Press.
- United States Census Bureau. (2014). *American community survey*. Retrieved from <https://www.census.gov/programs-surveys/acs/>