Urban residential wildlife habitat project

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Abstract

The Urban Residential Wildlife Habitat Program is an initiative of the Southeast Region U.S. Fish and Wildlife Service and the SouthFace Energy and Environmental Resource Center. This project is one of several that the Service's Southeast Region is involved with under a fledgling community assistance effort titled "The Small Urban Refuge Initiative." The objective of the SouthFace project is to develop a number of wildlife habitat areas along a path circling an energy-efficient home located on an urban residential lot in Atlanta, Georgia; and to demonstrate the integration of environmentally- friendly practices inside and outside of the dwelling.

INTRODUCTION

We live in a crowded world, rapidly approaching 6 billion people. It is a world in which more and more people are living in the urban context that is swelling to envelope the suburbs (Chudacoff 1975) and, as Max Stackhouse (1971) said, bursting the "bounds of the city." It is also a world that is less and less green. In the 14-county Atlanta, Georgia area, we destroy about 50 acres of trees a day.

Carl Anthony (1995), with the Earth Island Institute, speaks poignantly of this absence of green when he refers to "...the sense of loss suffered by many people who live in the city, who are traumatized by the fact that they don't have a functional relationship with nature." Walter Lowe (1992) lays it on the line saying that, "For a strictly human invention, a city can be a harsh place for people." We would suggest that the same can be said for the other species, plant and animal, that we share cities with. Cities can be tough on life, regardless of form or species.

There is a growing emphasis on improving the biotic functions of the urban environment with the hope that we can also help improve human physical and social functions (Baugh 1998). One of the ways these improvements are being brought about is through the conservation, restoration, and even the creation of urban natural areas, habitats, and green spaces. The Urban Residential Wildlife Habitat Program is one small example of this.

The Southeastern Region of the U.S. Fish and Wildlife Service (hereafter referred to as the Service), through a combined Challenge Matching Grant and Partners in Fish and Wildlife grant, is cooperating with the Southface Energy and Environmental Resource Center in the development and implementation of the Urban Residential Wildlife Habitat Project in the heart of Atlanta. This particular Project is one of several that the Service is involved in under a fledgling community assistance initiative titled "The Small Urban Refuge Initiative."

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The purpose of the initiative is to provide technical assistance and sometimes funding to projects that encourage the conservation, restoration, and management of habitat and wildlife in urban settings. Projects range in size from 5 to 5,000 acres, and in nature from residential demonstration habitats to large urban wetlands.

The objective of the SouthFace Project is to develop a number of wildlife habitat areas along a path circling an energy-efficient home located on an urban residential lot and to demonstrate the integration of environmentally friendly practices inside and outside of the dwelling.

Geothermal heat, solar shingles, and state-of-the art insulation and lighting have been used throughout the home. Healthy living, resource and energy efficiency, and accessibility are demonstrated in the internal and now, through the Project, in the external environment. The Project helps link the innovative, energy efficient, sustainable home/office building with the land on which it sits in order to provide a model for holistic living in the urban/suburban context.

Each year over 6,000 people visit SouthFace. Many are drawn from urban, inner-city neighborhoods and communities. To assist visitors, we have developed a self-guided brochure of the Project. The brochure follows the path around the property, coordinating appropriate details about habitat elements with 9 numbered stops along the way. The brochure includes a map of the landscape, as well as more detailed information about each of the habitats. Stops include butterfly gardens, a wildflower meadow in a storm water retention pond, bat and bird boxes, rock gardens, woodland gardens, and a pond with a pump driven by solar energy.

We live in a world of waste. The Project puts some of that waste to good use. For example, recycled concrete, or "recrete" provides exceptionally good material for the construction of walks, retaining walls, and planters. The benefits to wildlife are considerable. As with rock, recrete provides interstitial spaces in the joints between the blocks. These spaces create homes for insects, amphibians, and reptiles. Other recycled materials, such as leaves and grass from yard waste and brush from yard trimmings, have been used in developing the habitats. Another resource-efficient element used outside is the mulch that helps maintain the habitats' front yard. Last year we experienced the worst drought in 30 years in our area, and the mulch aided in saving some of the plantings. The back porch or landing at SouthFace is built from lumber made of cedar chips and recycled plastic. The picnic tables located along the path are made of 100% recycled plastic lumber. Both of these products are not only resource efficient, but they are also very durable.

In approaching urban greening, we need to consider the concepts toward wildlife and habitat that develop out of the urban-life experience (often negative) and approach the modification of these concepts with positive experiences and education. How we think about or perceive the terms "wildlife" and "habitat" plays a critical role in how we conceptualize them in the urban/suburban context. For this reason environmental education, particularly in childhood, is an important and necessary component of working toward positive, ecologically sound community change. SouthFace provides tours of the facility to many school groups each year. In addition, the Project is located adjacent to the SciTrek Science and Technology Museum, a science education center in Atlanta. SouthFace has had the opportunity to partner with SciTrek offering programs for children ranging from energy efficiency to wildlife habitats to solar energy. SouthFace is also working with a home schooling program. Through this partnership, students ages 9-13 work with a professional landscape architect on landscape planning, implementation, and maintenance as well as with biologists from the Atlanta Botanical Gardens and the State Botanical Gardens at Athens, Georgia on plant biology, water and soil issues, habitat development, and many other subjects. In this process, students are expected to learn real-life skills that they can take back to their communities in order to help improve their neighborhoods. SouthFace hopes to continue to expand this type of relationship to other students and educators.

Constructing the path, planting vegetation, and developing related educational material for the Project has also provided the opportunity to train a number of college-level student interns in urban wildlife and habitat issues and techniques. In addition to working on specific wildlife habitat enhancement projects on SouthFace property, interns have also taken part in native plant rescues conducted by the Georgia Native Plant Society.

In the Thunder Tree, Robert Pyle (1993) writes that "direct, personal contact with other living things affects us in vital ways..."Architect Nan Fairbrother suggests that we can enhance these contacts by creating a "living space with space for living nature," and David Nicholson Lord (1987) recommends that we create this space by opening up the hidden dimensions of nature and "bringing wilderness back into our homes and our minds and our settlements..."

After all, the techniques and methods for an ecological "reinhabitation" (McClosky 1996) of the cities, with a greater diversity of plant and animal species, exist today. We have to come to believe, however, that cities can be something other than what they presently are.

In closing, there is a growing emphasis on improving the biotic functions of the urban environment. We've started to look at habitat and wildlife in the urban context with what David Nicholson-Lord (1987) says are "fresh eyes, seeing new possibilities in old things." How we approach things depends a great deal on how our perceptions have been trained to view them, how our intellects have been trained to conceptualize them, and our spirits to value them (Baugh 1998). If we perceive of urban settlements as "a harsh place(s) for people," that's probably the way they will remain. If, however, we perceive of cities as "emerald islands" (Slack 1994) with high species diversity, and environmentally aware citizenry, that may be what they become (Baugh 1997).

Even though the Urban Residential Habitat Project has been subject to a drought, strong and damaging windstorms, and some vandalism, it offers the potential to demonstrate integrated urban/suburban living with a significant opportunity to include wildlife habitats as part of the urban residential scheme.

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