

Burlington Community Wildlife Habitat Initiative

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Proposal To:
Community-University Partnerships and Service-learning (CUPS)
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Description and Problem Statement

Increased urban development in Burlington has brought about several detrimental ecological problems. Habitat fragmentation, increased storm water runoff, loss of beneficial green community space, and an overall lack of ecological functionality within the surrounding landscape are all primary examples of such problems. Major contributing factors to these issues include poor urban planning and zoning and inadequate regulation to preserve natural areas. Landscapes containing natural flora and fauna have been replaced by structures designed for human use, including roads, parking-lots, and buildings; none of which contribute to the wellbeing of Burlington's native ecology.

Numerous scientific studies have demonstrated the fact that wildlife contributes to both environmental and community health of cities. The United Nations summarized the role of wildlife and biodiversity within cities by stating,

Although cities occupy just 2 per cent of the Earth's surface, their inhabitants use 75 per cent of the planet's natural resources. Cities draw on their surrounding ecosystems for goods and services, and their products and emissions can affect regional and even global ecosystems. Healthy ecosystems and biological diversity are vital for cities to function properly. Ecosystems provide three main kinds of services to the city: provisioning, regulating and enriching. While some of these services are easily measured, such as the provision of food and fresh water, others are harder to quantify, such as the contribution an ecosystem makes to quality of life in aesthetic or spiritual terms.¹

This study suggests that native biodiversity plays an important role in the stability and productivity of urban centers. Although certain qualities are hard to measure – such as aesthetic value and sense of place – these contributions are evident to community members.

As Burlington becomes increasingly more urbanized and its population grows, it is gradually moving further away from its agrarian roots. Coupled with this trend is a declining sense of place among city residents; a trend which can potentially have negative impacts. As Burlington's natural areas are slowly diminished, there is less opportunity for community members to connect with the natural heritage of the area. This, in turn, often leads to increased incidents of vandalism among youth who no longer hold a sense of pride in their surrounding environment and community, as has been evidenced in and around Burlington. Natural habitat areas are gradually disappearing in Burlington, contributing to a diminished sense of place in Burlington communities.

As a group we intend to contribute to the education and awareness of the Burlington community with regard to the benefits of preserving natural wildlife habitat. The goal is to help to improve intercommunity connections and reconnect people with the natural environment by fostering a sense of place for community members.

Improvement of community spaces in Burlington will involve the assistance of the Burlington Community Wildlife Habitat Initiative, which is a National Wildlife Federation (NWF) community certification program. The goal of this program is to create and restore wildlife habitat in U.S. cities by providing a network of areas where wildlife can access food, water, shelter, and places to raise their young. In addition, the NWF

¹ United Nations Environment Programme. 2005. *Ecosystems and Biodiversity: The Role of Cities*. http://www.unep.org/DPDL/PDF/Ecosystems_and_Biodiversity_Role_of_Cities.pdf

seeks to strengthen inner-city communities through the implementation of these projects. As an excerpt from the NWF website states:

Community Wildlife Habitat projects benefit the entire community of people, plants and wildlife through the creation of sustainable landscapes that require little or no pesticides, fertilizers, and excess watering. These landscapes help keep water and air resources clean. They are healthier for people and the environment, and are less resource-dependent than conventional landscapes. Habitat landscapes can serve to beautify our urban areas and give residents pride in their neighborhoods.²

Working in conjunction with this national program will help to simultaneously facilitate our community outreach objectives while providing essential wildlife habitat in the Burlington area. Designating and certifying these sites in collaboration with the NWF initiative will also establish Burlington as an active example of habitat restoration, establishing an example for others to follow both environmentally and socially.

Objectives and Timeline

- 1) Speak with regional director of National Wildlife Federation and establish partnership by February 16.
- 2) Contact appropriate Burlington city officials to discuss feasibility of creating a demonstration area in a Burlington “open space” by February 25.*
- 3) Present work-plan on March 3.
- 4) Conduct research and create design for habitat restoration area (e.g. rain-garden, backyard example, etc). The twofold purpose of this design will be to 1) present it to NWF and/or community members, and 2) potentially implement the design as a demonstration area in the Burlington area. Complete design by March 10.
- 5) Obtain permission from UVM to use GPS unit in order to map areas around Burlington by March 12.
- 6) Contact appropriate city of Burlington officials in order to obtain Burlington GIS base-maps by March 15.
- 7) Locate areas on UVM campus and the greater Burlington area which are already able to be certified by March 20.
- 8) Document details about these areas including geographic location, current land-owners, and a brief history of the area by March 27.
- 9) Contact land-owners and/or people affiliated with these areas and educate them about the NWF certification project. Obtain permission to certify these areas by March 30.
- 10) Map these locations with a GPS unit and import data into a Burlington GIS base-map in order to create a presentable map of our work and progress by April 8.

² National Wildlife Federation. 2006. *Community Habitats*.
<http://www.nwf.org/backyardwildlifehabitat/community.cfm>

- 11) Begin certifying areas through NWF, and complete certification by April 19.
- 12) Present our progress, project design and map during NWF meeting on April 8.
- 13) Final presentation (April 18 – April 27)

*Step 2: This step will determine our course of action regarding either A) Creating or improving a demonstration site on public/school property and certifying it, or B) Improving and/or certifying an existing area and using it as a demonstration site for the Burlington community.

Methods

Our initial step in the Burlington Community Wildlife Habitat Initiative project includes meeting and networking with local partners who are interested in the long-term goals of certifying Burlington as wildlife habitat. The first of these meetings was held on February 16, 2006, where we were able to obtain more information about the project from Liz Soper of the National Wildlife Federation. Liz is one of the leading coordinators of the Initiative. In addition to Liz, we were able to meet with other interested partners within the greater Burlington area, including city officials, community gardeners, local educators, and employees of Gardener's Supply. Each of these representatives will provide valuable resources as we work towards the certification of wildlife habitat.

Lisa Coven of Burlington's Parks and Recreation Department, one of the individuals representing the city during this project, will be our initial contact in order to determine whether the improvement of a Burlington community space is feasible. If the city feels as though this is a possibility, we will determine the location of a community demonstration site and work with other interested community members and gardeners to design the site based on the habitat certification requirements. We will then present our design for the demonstration site to the city of Burlington by the middle of March, as well as to the community during a NWF project workshop on April 8th if the site is approved.

In collaboration with the Habitat Team that is leading the project, we will begin to involve interested community members surrounding the demonstration site in order to educate them about the project and gain support for the implementation of the demonstration site that we have designed. We will then determine a date in late April or early May with our project partners as to when our design can be implemented – a task which will either be headed up by our group or community members depending on time constraints.

There possibility does exist that improving a public community space within Burlington will not be possible given the time constraints and red-tape we face with this project. If this occurs, we will still work toward the goal of the initiative through our plan to certify wildlife habitat in Burlington that currently exists. There are a number of natural areas throughout the city that already meet the requirements of the National Wildlife Federation's community habitat program. Our role will be to identify these areas, inform the appropriate individuals who own or maintain these areas about the program, and then

proceed with the certification process in these areas. Our goal will be to certify a number of different areas within the Burlington community while incorporating the notion that these areas should follow a logical pattern of connectivity to maximize efficiency.

By utilizing GIS and GPS technology, we hope to collect data pertaining to our progress in the certification process and ultimately create a presentable map which details our work. This will involve contacting appropriate city officials in the planning department who can provide existing base-maps on which we will import our collected data. This work will provide a valuable resource to the city of Burlington and the NWF as they certify additional cities in the future.

Along with the certification of these areas, we will create one site as a main demonstration site for people to visit and learn more about the community project that is taking place. By displaying information about the site and the Burlington Community Wildlife Habitat Initiative, we feel that people will become interested in getting involved to make the goals of this project a reality throughout the Burlington Community. Our work will directly influence the future success of this project.

Constraints

There are several possible constraints we have initially identified which may or may not be encountered during the course of this project. The first constraint is related to site selection. Once a site is chosen, the necessary permits must be obtained from the City Council, Parks and Recreation, and the Planning Commission. Due to major budget cuts in the city of Burlington, and particularly the Parks and Recreation Department, we have been informed that permission to utilize a site may be difficult to obtain, as the City prefers to leave these unclaimed spaces as they are to avoid staffing, upkeep, and funding issues. To successfully obtain permission from the City, we have been told that vocal support from local residents will be necessary.

The second constraint is then related to community contacts and involvement. Community involvement is crucial to this process, not only in gaining the support and permission of the City, but also to the sustainability of the site. There is greater community in some neighborhoods than in others, and our challenge will be to find people willing to lobby for the creation of the site, and be willing to commit to continued involvement. Our contacts at the National Wildlife Federation may be crucial here.

This issue of sustainability is also a major possible constraint. While we will accomplish all we can to further this project, the reality is that we are graduating in May, and the furtherance and maintenance of a site will need to be taken over by another individual or group. Ideally, community members would volunteer to maintain the site; but other possibilities include service-learning projects by classes such as NR 105, 206, and so forth.

Lastly, funding is another general constraint. With Burlington apparently reticent to fork over further funds to create new green sites, money for staffing, supplies, and upkeep may be difficult to come by. Fortunately, some support may be provided by the NWF.

Deliverables

Overview map of project area(s)
PowerPoint Presentation
Project plan and site framework
Implementation of a habitat demonstration area
Process documentation for future project use

Budget

Any materials for project implementation beyond the use of personal computers and a projector for planning, mapping, presenting our project will be supplied by Gardner's Supply.