



Monarch on purple coneflower
Photo Credit: Angelique Hjarding

THE BUTTERFLY HIGHWAY: CONNECTING PEOPLE TO NATURE

Angelique Hjarding

Pollination ecosystem services provided by managed honeybees and native bumblebees and butterflies are critical to maintaining biological diversity as well as agriculture services necessary for our food systems. Much attention had been focused on conserving pollinator habitat in rural areas to support agriculture but there is a great need to conserve habitat in urban ecosystems as well. Urban sprawl consumes valuable forest and meadow habitat and replaces it with weed free lawns and impervious surfaces such as roads and rooftops.

The [Butterfly Highway](#) is a grassroots pollinator habitat program that was created to address declining pollinator habitat in urban residential areas. The program began as a part of a research project at the University of North Carolina Charlotte as a way to address biodiversity conservation and environmental justice issues in urban communities in Charlotte, North Carolina. The Butterfly Highway began in 2014, with several communities in Charlotte that wanted to beautify their environment by planting native butterfly gardens. Through the Butterfly Highway, these communities have

transformed community gardens, backyard gardens, public spaces and park fragments into new pollinator and wildlife habitats. The Butterfly Highway has also provided opportunities to participate in a community based citizen science project that monitors butterflies and bumblebees.

The Butterfly Highway addresses a community identified issue of beautification while at the same time addressing pollinator habitat loss in urban areas. Participatory Action Research methods were used to ensure equitable community participation in project planning, implementation and research. Community partnerships were created to gather input and feedback on plant selection, garden design and even the project name was chosen based on community feedback. Though the project focused on creating habitat for all pollinators, the name "Butterfly Highway" was much more appealing to community members. It was a unanimous decision that no one wanted a "Bee Highway" through their neighborhood though they understood the importance of bees in their gardens.

In a relatively short period of time, the Butterfly Highway has made impacts from

a local to a regional scale. These impacts have been both environmental and social in nature and long term impacts of the Butterfly Highway will continue to be studied. Several important outcomes include:

- Increased habitat for pollinators. Since the program was launched, participants in the Butterfly Highway have restored more than 850 acres of habitat for pollinators at over 1100 sites statewide. In addition to sites in North Carolina, there are habitats registered on the Butterfly Highway from Mississippi to New York.
- Creating community. Through in depth interviews with participants, the Butterfly Highway has been shown to create new asset based connections on a neighborhood and community level. Participants say they feel a closer connection to other participants in the Butterfly Highway and that they have an increased connection to their neighborhood after participation. Several participants also said that they have a more favorable view of their neighborhood after being a part of the project.



Kids at a Community event learning about pollinators
Photo Credit: Angelique Hjarding

- Increased community capacity to address environmental justice issues. Community Alliance for Wildlife (CAW) is a new community based wildlife conservation organization born in the neighborhoods that participated in the Butterfly Highway in Charlotte. CAW will be a chapter of the North Carolina Wildlife Federation and founding members were co-authors of a grant from the National Fish and Wildlife Foundation to pilot an innovative community conservation training program called Wildlife Stewards. One of the primary activities of the group will be to address environmental justice issues in the community that affect both people and wildlife.
- Increased project capacity. In 2015, the Butterfly Highway was adopted as an official program of the [North Carolina Wildlife Federation](#). The increased capacity provided by the North Carolina Wildlife Federation has helped the Butterfly Highway grow into a statewide community-based environmental restoration initiative. From backyard 'Pollinator Pitstops' to large-scale roadside habitat restoration, the program is working to create a network of native flowering plants to support butterflies, bees, birds, and other pollen and nectar dependent wildlife. While there is still a focus on restoring habitat in urban spaces, the program has opened up opportunities for restoring habitat on farms, roadsides and in utility right of way corridors.
- Partnerships with local government agencies and municipalities. Mecklenburg County Park and Recreation joined the Butterfly Highway early on by adding 20 Butterfly Highway sites at nature centers, recreation centers and senior

centers. They were partners on a grant from the National Fish and Wildlife Foundation that will provide training for recreation center staff on pollinator habitats and will provide additional nature based recreation programming for 250 youth at community recreation centers. The grant also provides funding for additional Butterfly Highway gardens on county owned land.

The mayor of the City of Concord, North Carolina, signed the National Wildlife Federation's Mayor's Monarch Pledge and hired a full time environmental educator to provide support for creating new pollinator habitats and programs in the city. Part of this pledge includes establishing new Butterfly Highway sites.



CAW members plant a Butterfly Highway garden at Brisbane Academy Preparatory School. Photo Credit: Angelique Hjarding



CAW nest box project
Photo Credit: Angelique Hjarding

- Corporate partnerships. Private landowners manage much of the land in urban areas and on the rural urban fringe. Through the North Carolina Wildlife Federation, the Butterfly Highway has partnered with several regional utility companies to create new pollinator habitat in utility right of ways. The program is also working with solar companies to explore ways to create pollinator habitat as a part of new solar array installations.

The Butterfly Highway project has proven to be a successful intervention to reconnect communities with nature. Part of the success can be attributed to the participatory nature of the project that places an emphasis on environmental conservation informed by local knowledge. The project has also worked to build community assets that benefit both humans and wildlife in a positive non-conflict oriented way.

Looking towards the future, the Butterfly Highway project will be a primary mechanism to affect change on both a regional and

local level. Increasing awareness about pollinator conservation and expanding the Butterfly Highway in North Carolina is a top priority for the North Carolina Wildlife Federation. The Community Alliance for Wildlife and research partners from the University of North Carolina Charlotte will continue to work towards utilizing the Butterfly Highway as an intervention to address social and environmental justice issues in urban communities of color. Together, these and other organizations that have adopted the Butterfly Highway will provide a safe haven for native plants, bees and butterflies and create healthier cities for humans and wildlife.

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References:

- Butterfly Highway. North Carolina Wildlife Federation. <http://www.butterflyhighway.org>.
- North Carolina Wildlife Federation. <http://www.ncwf.org>.