

The Habitat Connectivity Pledge

A program developed by the Bloomington Environmental Commission

Introduction

In November 2017, the Bloomington Environmental Commission (EC) released the *Bloomington Habitat Connectivity Plan*, BHCP, (<https://bloomington.in.gov/boards/environment>). The BHCP resulted in 5 recommendations to enable the city to restore and improve the natural environment of our local bioregion.

1. Conserve habitat before, during, and after development.
2. Prioritize the habitat potential and permanent habitat connectivity of an area when making land-use decisions.
3. Connect isolated areas of habitat by producing greenspace corridors.
4. Enhance habitat quality in stable areas by planting native species and removing invasive species.
5. Inform Bloomington residents of the ecological benefits of habitat connectivity and encourage citizen involvement in habitat restoration.

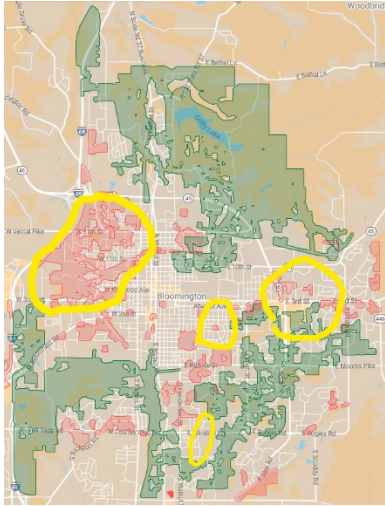
This pledge and the associated map are one step toward achieving the five recommendations.

The world we know is losing ecosystems that have been in place for thousands of years. Some scientists believe we are within the sixth mass extinction on Earth right now. To keep our ecosystems viable and their services thriving, we need to change certain human behaviors. One behavior is how we landscape our cities. Historically, we viewed nature as belonging in the countryside, separate from city life. Today, we recognize that nature belongs in both the city and the countryside.

The EC hopes to establish connected corridors through Bloomington, which will include privately owned land to safeguard wildlife movement and reproduction. We ask that you pledge to take care of some of your yard to add to Bloomington's total environmental health and ecosystem services.

You can choose the size and aesthetic; whatever yard space and native plants you want to use as greenspace would be beneficial. Joined together with neighboring greenspaces, we can create connected habitat corridors. Creatures around us need to find ways to get from one safe haven to another. We must make that easier for them.

The Map



Looking at the map on the left, the dark green areas represent the greenspace upon which this plan was based. This pseudo-circle of greenspace is considered relatively safe from development due to creeks, parks, and more. The yellow areas represent the gaps in the pseudo circle. By filling these gaps, we can connect the green-colored current greenspace and create a corridor.

Think of a bicycle wheel superimposed on Bloomington with spokes connecting different parts of the wheel. These are the travel ways for plants and animals. This map will eventually show how citizens are crafting the “bike wheel habitat.”

The EC hopes that residents will voluntarily fill in the yellow circles, bridging our currently fragmented corridor. Residents can embrace our desire to connect native habitats to enable genetic diversity, increase pollinator populations, provide resilience to significant weather events, and mitigate climate change, all by planting their own little part of Bloomington’s native habitat.

Digging a Little Deeper

Imagine the whole ecoregion of South-Central Indiana 10,000 years ago after the last glaciers melted and receded. That ecosystem was a dynamic complex of plants, animals, microorganisms, and the non-living environment interacting as a functional unit. These plant, animal, and microorganism species occurred and evolved in concert with each other. They adapted to the local climate and soil conditions; developed defenses to diseases and pests; and became part of the food web that supports birds, insects, plants, and microorganisms with which they co-evolved.

As the glaciers receded, humans began to inhabit this ecoregion too. Like other animals, we had a survival plan, but it was not in the best interest of the plants and animals that cohabitated with us. Time passed as humans used up more and more of the natural resources and disrupted natural habitats.

Now we know we must consider an urban landscape as a combination of plants that enhances and mimics our natural ecosystem; provides an aesthetic sense of place; and benefits ecosystem services such as erosion control, heat island effect, and water infiltration. Many urban wildlife species require connected habitat patches for different portions of their life cycle. A good

landscape is diverse in species variety and also contains a vertical architecture. This vertical architecture is what you would see in a mature forest; 1) a canopy or over story layer containing trees that create an arboreal canopy or ceiling providing shade and that reach a height at maturity of over 45 feet; 2) an understory layer containing mid-level trees that reach a small to medium height at maturity of between 25 to 45 feet; 3) a shrub layer occupying the space three to twelve feet in height at maturity of multi-stemmed shrubs; 4) an herbaceous layer containing ephemeral, evergreen, or flowering plants; and 5) a ground layer covering the soil surface and includes decaying leaves and twigs, moss, wood and leaf mulch, and low-growing plants that may reach only about 12 inches tall at maturity.

Very few people can mimic a mature upland forest ecosystem in their urban landscape, hence this connectivity project. Think of the whole city as the ecosystem, and if you have one large canopy tree, this can be your contribution. If you plant native shrubs or herbaceous plants for pollinators, that is your contribution. No one can do it alone, but combining the features in our yards or patios with the neighboring ones, renews a native upland forest habitat called Bloomington.

Take the Pledge

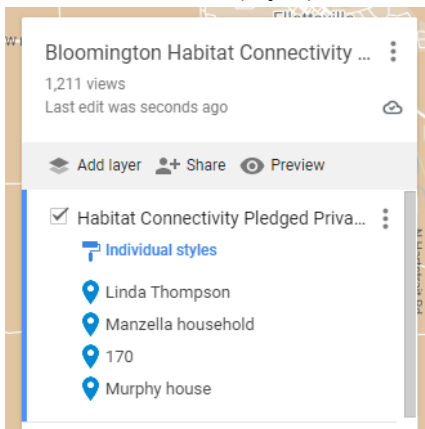
To take the pledge, all you need to do is include the relevant native landscaping of your property on the Bloomington Habitat Connectivity Map. The instructions for putting a pin on the map with your greenspace are below.

Map Labeling Instructions

- 1) Scan the QR code, or [click here](#) to be taken to the Map.



- 2) Click on the white space in the content pane within the Habitat Connectivity Pledged Private Land box (layer). Make sure you do not click the points within that box.

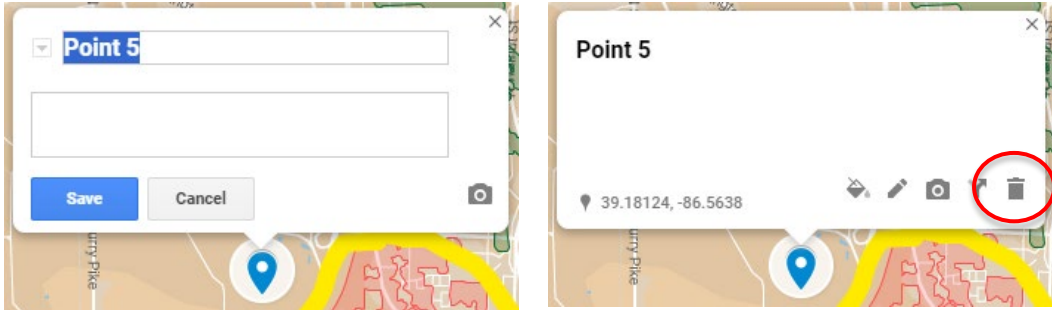


- 3) Next, Click add Marker on the top part of the screen.

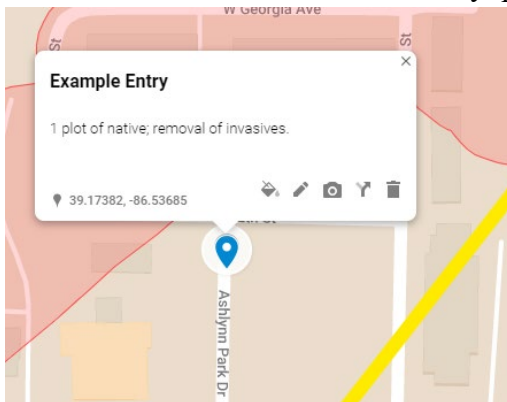


- Put your cursor over where you want to place the marker. You can then zoom in to your property by using the scroll wheel on the mouse. Do not click on the screen or a marker will be made. Once you have zoomed in enough, click where you want to place the marker.

Note: If you accidentally place a marker, please click cancel and then trash button. Visuals are shown below.



- Label the marker with your name and in the description express how much land you are pledging and what you hope will be planted there. If something is already planted there, describe what it is. To save this entry, please click the save button!



- You are finished!

Thank you for contributing to the Bloomington Habitat Connectivity Plan!

If you have any further questions please feel free to contact Linda Thompson at thompsol@bloomington.in.gov.