



City of Bloomington

Environmental Commission

The mission of the Environmental Commission is to promote the stewardship and preservation of the city's environment and natural resources by seeking out and responding to emerging issues, addressing them with sound long-term policy recommendations, and increasing local environmental awareness and engagement.

ENVIRONMENTAL COMMISSION NOTICE and REGULAR SESSION AGENDA

August 21, 2025, 6:00 PM
Hooker Meeting Room #245
City Hall, 401 N Morton Street Bloomington, IN 47404
Hybrid Meeting

Join Zoom Meeting here:

<https://bloomington.zoom.us/j/8657231124?pwd=mPqboSiD0AhVwKSgkuW2aO7NHixihO.1&omn=81563021562>

Meeting ID: 865 723 1124

Passcode: COBPT

or on Community Access Television Service (CATS): <https://catstv.net/government.php>.

Auxiliary aids are available upon request with adequate notice.

Environmental Commission Members

Carrie Albright, Chair

Appointed by Mayor

Term: February 1, 2024 to January 31, 2026

Nadia Cain

Appointed by Common Council

Term: February 1, 2024 to January 31, 2026

Matt Caldie, Vice Chair & Treasurer

Appointed by Mayor

Term: February 1, 2025 to January 31, 2027

Kasie Chappell

Appointed by Common Council

Term: February 1, 2025 to January 31, 2027

Norman Crampton

Appointed by Mayor

Term: February 1, 2025 to January 31, 2027

Adam Fudickar

Appointed by Common Council

Term: February 1, 2025 to January 31, 2027

Shannon Gayk

Appointed by Common Council

Term: February 1, 2024 to January 31, 2026

Adam Martinez, Secretary

Appointed by Common Council

Term: February 1, 2025 to January 31, 2027

Mitchell Owens

Appointed by Common Council

Term: February 1, 2024 to January 31, 2026

David Parkhurst

Appointed by Mayor

Term: February 1, 2024 to January 31, 2026

Vacancies: 2

1. Call to order and quorum confirmation:

2. Introductions and Roll Call

	<u>In Person</u>	<u>Absent</u>	<u>Zoom</u>
Carrie Albright			
Nadia Cain			
Matt Caldie			
Kasie Chappell			
Norman Crampton			
Adam Fudickar			
Shannon Gayk			
Adam Martinez			
Mitchell Owens			
David Parkhurst			
Rachael Johnson, City Liaison			

3. Approval of June 2025 minutes*

	<u>Yes</u>	<u>No</u>	<u>Abstain</u>
Carrie Albright			
Nadia Cain			
Matt Caldie			
Kasie Chappell			
Norman Crampton			
Adam Fudickar			
Shannon Gayk			
Adam Martinez			
Mitchell Owens			
David Parkhurst			

4. Public comment

Limit 5 minutes per person, 20 minutes total

5. Old Business

- a. Bee City USA Resolution* (Biodiversity Working Group)
 - a. Confirm attendance for September 3, 2025 City Council meeting
- b. Downtown Gardens (Carrie Albright)
- c. Working group updates
 - i. Light Pollution
 - ii. Biodiversity
 - 1. Habitat Connectivity Map outreach
 - 2. Mayor Monarch Pledge

- 3. Bug Fest
 - iii. Water Quality
 - iv. Special Projects
 - v. ECPC
 - 1. Designate committee members
 - 2. Schedule meeting
- 6. New Business
 - a. Annual Goals & Budget (Carrie Albright)
- 7. Staff Update
 - a. Hopewell Brownfields Update
 - b. September Meeting
 - c. Tree Assistance Program
<https://bloomington.in.gov/about/trees/assistance-program>
 - d. Monroe County Master Gardeners Association Fall Fling
<https://www.mcmga.net/fall-fling>
- 8. Reports from:
 - a. Tree Commission (TC)
 - b. Environmental Resource Advisory Council (ERAC)
 - c. Friends of Lake Monroe (FOLM)
 - d. Bloomington Commission on Sustainability (BCOS)
 - e. Monroe County – Identify and Reduce Invasive Species (MC-IRIS)
 - a. Native Plant Sale: September 6, 2025, 9 am to 1 pm, Switchyard
Park Maintenance Building, 1601 S. Rogers St.
 - f. Clean Community
- 9. Commissioner announcements
- 10. Upcoming Meeting
 - a. September 18, 2025, 6:00 pm, Hooker Room, Zoom, and CATS

11. Adjournment

** Item to be voted on*

The views expressed here are solely those of the Environmental Commission as approved in their public meetings, and do not necessarily reflect the views, policies, or positions of the City of Bloomington. Only the Office of the Mayor has the authority to issue policy statements on behalf of the Executive Branch of the City of Bloomington.

The City is committed to providing equal access to information. However, despite our efforts, at times, portions of our board and commission packets are not accessible for some individuals. If you encounter difficulties accessing material in this packet, please contact Melissa Hirtzel at hirtzelm@bloomington.in.gov and provide your name, contact information, and a link to or description of the document or web page you are having problems with.

As a quorum of the Commission or its committees may be present, this gathering constitutes a meeting under the Indiana Open Door Law (I.C. § 5-14-1.5). For that reason, this statement provides notice that this meeting will occur and is open for the public to attend, observe, and record what transpires.

The City offers virtual options, including CATS public access television (live and tape delayed) found at <https://catstv.net/>. Working group meetings may be found at <https://bton.in/ECWGreco>.



City of Bloomington

Environmental Commission

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ENVIRONMENTAL COMMISSION NOTICE and REGULAR SESSION AGENDA

June 26, 2025, 6:00 PM
Hooker Meeting Room #245
City Hall, 401 N Morton Street Bloomington, IN 47404
Hybrid Meeting

Join Zoom Meeting here:

[https://bloomington.zoom.us/j/8657231124?
pwd=mPqboSiD0AhVwKSgkuW2aO7NHixihO.1&omn=81563021562](https://bloomington.zoom.us/j/8657231124?pwd=mPqboSiD0AhVwKSgkuW2aO7NHixihO.1&omn=81563021562)

Meeting ID: 865 723 1124

Passcode: COBPT

or on Community Access Television Service (CATS): <https://catstv.net/government.php>.

Auxiliary aids are available upon request with adequate notice.

1. Call to order and quorum confirmation:
2. Introductions and Roll Call

	<u>In Person</u>	<u>Absent</u>	<u>Zoom</u>
Carrie Albright	X		
Nadia Cain	X		
Matt Caldie	X		
Kasie Chappell	X		
Adam Fudickar	X		

Shannon Gayk	X	
Adam Martinez	X	
Mitchell Owens	X	
David Parkhurst		X
Rachael Johnson, City Liaison	X	

3. Approval of May 2025 minutes*

	<u>Yes</u>	<u>No</u>	<u>Abstain</u>
Carrie Albright	X		
Nadia Cain	X		
Matt Caldie	X		
Kasie Chappell	X		
Adam Fudickar	X		
Shannon Gayk	X		
Adam Martinez	X		
Mitchell Owens	X		
David Parkhurst			

4. Public comment

Limit 5 minutes per person, 20 minutes total

None.

5. New Business

a. Downtown Gardens (Carrie Albright)

A local garden designer is getting feedback on planting a native garden on city property on the corner of 4th & Washington. Some questions that came up:

- i. Will there be trees? Likely only the single existing tree
- ii. How much maintenance? Very little after the first year.
- iii. What plants will be included?
- iv. Will this attract deer?
- v. What will happen if the plants don't thrive?
- vi. Will there be a bench?
- vii. Would it be preferable to plant a tree for shade?
- viii. Nearby residents use the spot to relieve their dogs. Is this being considered?
- ix. Has the church next door been contacted?

The commission is generally supportive of the idea.

6. Old Business

a. Working group updates

x. Light Pollution

The group met and discussed short and long term goals. They will reach out to city and campus officials to discuss light fixtures and potential improvements.

xi. Biodiversity

1. Bee City USA & Bee City Campus

Matt will meet with council-member Piedmont-Smith soon.

2. Habitat Connectivity

a. [Link](#)

b. Website Update

The EC's website needs updated with a link to the new map. Matt believes the text on the site should be updated. The group discussed changes to the website. Outreach will be discussed in the July meeting.

xii. Water Quality

No updates.

xiii. Special Projects

No updates.

b. Annual Report

Carrie recapped the annual report given to council. Dave Rollo asked about the status of the Environmental Commission Planning Committee (ECPC). It has been fairly inactive in recent years. Matt suggested it only focus on large or uniquely impactful projects. We may request Rollo join us in a future meeting.

7. Staff Update

a. Documents Update

a. Draft Working Group Descriptions

b. Draft Environmental Commission History

Rachael showed drafts. Working groups should update their language.

b. Climate Resilience Map

a. <https://experience.arcgis.com/experience/ee4f5219227f4863aac1b9d368f8bc09/page/Map>

The city has released a map that includes some data gather by EC members. Carrie suggested grouping city materials together to make outreach easier.

c. Buskirk Chumley Films

The group is willing to share on social media.

d. National Weather Service Citizen Science

The NWS is searching for volunteers to gather data on rain, hail, and snow.

8. Reports from:

- a. Tree Commission (TC)
No EC members attended.
- b. Environmental Resource Advisory Council (ERAC)
Nothing of note.
- c. Friends of Lake Monroe (FOLM)
No EC members attended.
- d. Bloomington Commission on Sustainability (BCOS)
Matt watched the recording of the meeting. It was mostly discussion about procedure.
- e. Monroe County – Identify and Reduce Invasive Species (MC-IRIS)
Rachael attended. They have applications on their website for replacement and removal programs. Dave Rollo talked about landscaping requirements for Bloomington and city planters which have non-native plants.
Spotted lanternfly have been spotted in Bartholomew County.

9. Commissioner announcements

Mitchell: Bugfest will be on Sep 13th. Matt will reach out to Megan about obtaining bug specimens.

IDEM is looking for public input for ways to improve “efficiency.”

efficiency@in.idem.gov

Carrie: How is our budget situation? Matt says we have not used any of our budget for the year. Some will be used for Bee City.

Carrie also suggested we strive for more learning opportunities, whether it be from commissioners or someone outside the EC.

Adam F. and Nadia may be interested.

10. Upcoming Meeting

- a. July 17, 2025, 6:00 pm, Hooker Room, Zoom, and CATS

11. Adjournment

7:44

** Item to be voted on*

The City is committed to providing equal access to information. However, despite our efforts, at times, portions of our board and commission packets are not accessible for some individuals. If you encounter difficulties accessing material in this packet, please contact Melissa Hirtzel at hirtzelm@bloomington.in.gov and provide your name, contact information, and a link to or description of the document or web page you are having problems with.

As a quorum of the Commission or its committees may be present, this gathering constitutes a meeting under the Indiana Open Door Law (I.C. § 5-14-1.5). For that reason, this statement provides notice that this meeting will occur and is open for the public to attend, observe, and record what transpires.

RESOLUTION NO. _____
A RESOLUTION of the Common Council of Bloomington, Indiana
designating Bloomington as a BEE CITY USA® affiliate.

WHEREAS, the mission of BEE CITY USA is to galvanize communities to sustain pollinators, responsible for the reproduction of almost 90% of the world's flowering plant species, by providing them with healthy habitat, rich in a variety of native plants and free to nearly free of pesticides; and

WHEREAS, thanks to the more than 430 species of native bees in Indiana, along with introduced honey bees, residents have very diverse dietary choices rich in fruits, nuts, and vegetables; and

WHEREAS, bees and other pollinators have experienced population declines due to a combination of habitat loss, poor nutrition, pesticides (including insecticides, fungicides, and herbicides), parasites, diseases, and climate change; and

WHEREAS, pollinator-friendly communities can benefit local and regional economies through healthier ecosystems, increased vegetable and fruit crop yields, and increased demand for pollinator-friendly plant materials from local growers; and

WHEREAS, ideal pollinator-friendly habitat (A) is comprised of mostly native wildflowers, grasses, vines, shrubs, and trees blooming in succession throughout the growing season to provide diverse and abundant nectar and pollen, since many wild pollinators prefer or depend on the native plants with which they co-adapted; (B) is free to nearly free of pesticides, as many pesticides can harm pollinators and/or their habitat; (C) comprises undisturbed spaces (leaf and brush piles, unmown fields or field margins, fallen trees and other dead wood) for nesting and overwintering; and (D) provides connectivity between habitat areas to support pollinator movement and resilience; and

WHEREAS, Integrated Pest Management (IPM), which is already used by the Bloomington Parks & Recreation department, is a long-term approach to maintaining healthy landscapes and facilities that minimizes risks to people and the environment by: identifying and removing the causes of pest problems rather than only attacking the symptoms (the pests); employing pests' natural enemies along with cultural, mechanical, and physical controls when prevention is not enough; and using pesticides only when no other method is feasible or effective; and

WHEREAS, supporting pollinators fosters broad-based community engagement in environmental awareness and sustainability; and

WHEREAS, the Bloomington Comprehensive Plan includes Goal 3.4 "Increase the areas of native shrubs, trees, and herbaceous plants to increase ecosystem services associated with green infrastructure, including improved soil, air, and water quality and increased carrying capacity of pollinators, birds, and other wildlife" as well as Policy 3.4.1: "Create a vegetated-habitat connectivity plan" and Policy 3.4.2: "Eliminate, to the greatest extent feasible, invasive plant and animal species." This goal and these policies support habitats for pollinators such as bees in Bloomington; and

WHEREAS, the City's Climate Action plan includes Goal G-2 "Increase quantity and quality of climate adaptive native habitats, "Strategy G-2A "Create and expand native habitat policies and infrastructure" and Strategy G-2B "Increase the use of native species and pollinator restoration areas." This goal and these strategies support habitats for pollinators such as bees in Bloomington; and

WHEREAS, the City of Bloomington has long been committed to planting pollinator friendly and native plants in its parks and public greenspaces. The City conducts regular weed wrangles (targeting invasives) and native plantings with volunteers, encourages and supports neighborhood pollinator gardens, and partners with a range of local organizations to run annual native plant sales (MC-IRIS), collect and distribute native seeds (Project Wingspan), and improve the urban tree cover (Canopy Bloomington), all of which benefit pollinator species; and

WHEREAS, affiliating with Bee City USA may result in cost savings for the Parks and Recreation Department by providing a variety of in-kind resources and support, including a welcome package with educational books, a habitat sign, and outreach materials; ongoing access to training, webinars, digital publications, and an online affiliate portal offering event planning, habitat creation, and pesticide reduction guidance; promotional opportunities through Bee City USA's communication channels; a custom logo and signage artwork; inclusion on a national map and directory; and direct access to Xerces Society staff for one-on-one technical support; and

WHEREAS, the Bloomington Environmental Commission contributes to city-wide education focused on pollinators and native plantings at its annual Bugfest, Earth Day events, Ecoheroes contest for students, and habitat connectivity plan; and

WHEREAS, Indiana University Bloomington, encompassing nearly 2,000 acres, was recently designated a Bee Campus USA and will serve as a key community partner by promoting pollinator habitat conservation, reducing pesticide use, and advancing education, research, and outreach efforts that support pollinators and their ecosystems.

NOW, THEREFORE, BE IT HEREBY RESOLVED BY THE COMMON COUNCIL OF THE CITY OF BLOOMINGTON, MONROE COUNTY, INDIANA, THAT:

Section 1: The City will submit this resolution to the BEE CITY USA program for certification as an official Bee City. The City of Bloomington supports and encourages healthy pollinator habitat creation and enhancement and aims to enhance understanding among local government staff and the public about the vital role that pollinators play and what all residents can do to sustain them.

Section 2: The Bloomington Environmental Commission is hereby designated as the BEE CITY USA sponsor and will be responsible for forming a BEE CITY USA Committee. The Urban Greenspace Manager within City of Bloomington Parks and Recreation Department is designated as the BEE CITY USA liaison. Facilitation of Bloomington's BEE CITY USA program is assigned to the Environmental Commission.

Section 3: The Environmental Commission is authorized to and shall pursue the following actions on behalf of the City of Bloomington:

- a. **Celebration:** Host at least one educational event or pollinator habitat planting or restoration each year to showcase Bloomington's commitment to raising awareness of pollinator conservation and expanding pollinator health and habitat.
- b. **Publicity & Information:** Install and maintain at least one authorized BEE CITY USA street sign in a prominent location, and create and maintain a webpage on the Bloomington Environmental Commission's website which includes a copy of this resolution and links to the national BEE CITY USA website; contact information for the BEE CITY USA liaison; reports of the pollinator-friendly activities the community has accomplished in the previous year(s); and a recommended native plant species list and integrated pest management plan (explained below).
- c. **Habitat:** Develop and implement a program to create or expand pollinator-friendly habitat on public and private land, which includes, but is not limited to, Identifying and inventorying Bloomington's real property that can be enhanced with pollinator-friendly plantings; creating a recommended locally native plant list to include wildflowers, grasses, vines, shrubs, and trees and a list of local suppliers for those species; and tracking (by square footage and/or acreage) annual area of pollinator habitat created or enhanced.
- d. **Pollinator-Friendly Pest Management:** Create and adopt a City-wide integrated pest management (IPM) plan modeled on Parks & Recreation's IPM plan, designed to prevent pest problems, reduce pesticide use, and expand the use of non-chemical pest management methods.
- e. **Policy & Plans:** Establish, through the Bloomington Common Council, a policy in the Bloomington Comprehensive Plan to acknowledge and commit to the BEE CITY USA designation and review the Comprehensive Plan and other relevant documents to consider improvements to pest management policies and practices as they relate to pollinator conservation, identify appropriate locations for pollinator-friendly plantings, and consider other appropriate measures.
- f. **Renewal:** After completing the first calendar year as a BEE CITY USA affiliate, each February, if funding is available, apply for renewal of Bloomington's BEE CITY USA designation following the format provided by BEE CITY USA, including a report of the previous year's BEE CITY USA activities, and paying the renewal fee based on Bloomington's population.
- g. **Bee City USA Committee:** Establish a Bee City USA Committee composed of representatives from the Environmental Commission and community partners, including but not limited to local environmental organizations, Indiana University Bloomington, and the Indiana Department of Natural Resources. This committee shall collaborate to advance Bloomington's Bee City USA goals through pollinator education, habitat restoration, outreach events, and promotion of native plant initiatives.
- h. **Annual Report:** Prepare and submit an annual Bee City USA report, compiled by the Bee City USA Committee in coordination with the Environmental Commission, detailing progress on pollinator conservation efforts, habitat creation or enhancement, community engagement activities, and any updates to recommended native plant and

pest management resources; this report shall be made publicly available on the Environmental Commission's website.

Section 4: Severability. If any section, sentence or provision of this resolution, or the application thereof to any person or circumstances shall be declared invalid, such invalidity shall not affect any of the other sections, sentences, provisions or applications of this resolution which can be given effect without the invalid provision or application, and to this end the provisions of this resolution are declared to be severable.

ADOPTED by the Common Council of the Bloomington, IN, this ____ day of _____, 20__.

Memo

To: Councilwoman Isabel Piedmont Smith

From: Shannon Gayk on behalf of the Biodiversity Working Group of the Bloomington Environmental Commission

Date: August 21, 2025

Subject: Bee City, USA Certification Initiative

Dear Councilwoman Piedmont Smith,

We are writing to explain why the Bloomington Environmental Commission is actively pursuing the Bee City, USA certification and how this aligns with our city's long commitment to environmental sustainability and community health.

1. Supporting Pollinator Health:

The primary goal of Bee City, USA certification is to recognize and promote cities that are dedicated to creating healthy habitats for pollinators, particularly bees, butterflies, and other essential insects. By achieving this certification, Bloomington will take an important step toward supporting the vital role that pollinators play in our ecosystem and food production systems.

2. Enhancing Biodiversity:

Bloomington's commitment to sustainability and ecological stewardship is exemplified by the initiative to create more green spaces and promote biodiversity. As part of the certification, the Environmental Commission highlights these efforts to cultivate pollinator habitats, provide native plants, and reduce pesticide use. These actions help maintain and restore biodiversity across our community, which is crucial for ensuring resilient and thriving ecosystems.

3. Community Engagement and Education:

Bee City, USA certification will also serve as an opportunity to engage and educate Bloomington residents about the importance of pollinators. Through this initiative, we will host events and community activities to raise awareness about pollinator conservation. This aligns with our broader goal of fostering a culture of environmental stewardship in our city, where residents, schools, and local organizations can all contribute to the protection of pollinators.

4. National Recognition:

Achieving Bee City, USA certification would also place Bloomington among the growing number of cities nationwide committed to sustainable and pollinator-friendly practices.

This recognition would highlight our city's dedication to environmental preservation, helping to further position Bloomington as a leader in sustainability efforts.

Fiscal Impact

Certifying Bloomington as a Bee City would involve an annual fee of \$400, based on population, to be covered by the Environmental Commission's budget with possible assistance from Parks and Recreation if needed. This modest cost is offset by potential savings and benefits, including free access to outreach materials, regular online workshops and trainings available to staff and commissioners, and direct support from Xerces Society experts in pollinator conservation and pesticide reduction. These resources provide ongoing professional development, reduce the need for external consulting, and strengthen the city's capacity to advance pollinator-friendly practices.

We believe that pursuing this certification is a strategic and impactful step toward enhancing Bloomington's environmental reputation while creating tangible benefits for our residents, our wildlife, and our economy.

Thank you for your continued support of the Bloomington Environmental Commission's initiatives.

Sincerely,
Shannon Gayk

For the Bloomington Environmental Commission

BEE CITY USA®

Resolution submitted by the Bloomington
Environmental Commission in partnership with the
Bloomington Parks and Recreation Department





The Science Is Clear: Pollinators Are in Peril

Parallel Declines in Pollinators and Insect-Pollinated Plants in Britain and the Netherlands

J. C. Biesmeijer,^{1*} S. P. M. Roberts,² M. Reemer,³ R. Ohlemüller,⁴ M. Edwar
A. P. Schaffers,⁷ S. G. Potts,² R. Kleukers,³ C. D. Thomas,⁴ J. Settele,⁸ W. E.

Despite widespread concern about declines in pollination services, little is known
patterns of change in most pollinator assemblages. By studying post-19
Britain and the Netherlands, we found evidence for parallel declines in both
diversity in both countries: bumblebees, honeybees, and hoverflies. Habitat
the assemblages with this decline, and the extent to which they are dependent on
estimates of the decline in pollination services.

However, the evidence for such declines remains scanty (5).

To adequately demonstrate a decline in pollinators, we need to know the extent to which they are dependent on

Long-Term Trends in Eastern North American Monarch Butterflies: A Collection of Studies Focusing on Spring, Summer, and Fall Dynamics

ANDREW K. DAVIS^{1,2} AND LEE A. DYER³

ELSEVIER

journal homepage: www.elsevier.com/locate/jip

Plant-Pollinator Interactions over 120 Years: Loss of Species, Co-Occurrence, and Function

Laura A. Burkle,^{1,2*} John C. Marlin,³ Tiffany M. Knight¹

Using historic data sets, we quantified the degree to which global change over 120
disrupted plant-pollinator interactions in a temperate forest understory community.
USA. We found degradation of interaction network structure and function and extirpation
50% of bee species. Network changes can be attributed to shifts in forb and bee
extinction in temporal mismatches, nonrandom species extinctions, and loss of spatial
network showed flexibility in response to future changes.

A historical review of managed honey bee populations in Europe and the United States and the factors that may affect them

Dennis vanEngelsdorp^{a,*}, Marina Doris Meixner^b

^aDepartment of Entomology, The Pennsylvania State University, 501 ASI Bldg., University Park, PA 16802, USA
^bLLH Bieneninstitut, Erlangen-Nürnberg, Germany

Patterns of widespread decline in North American bumble bees

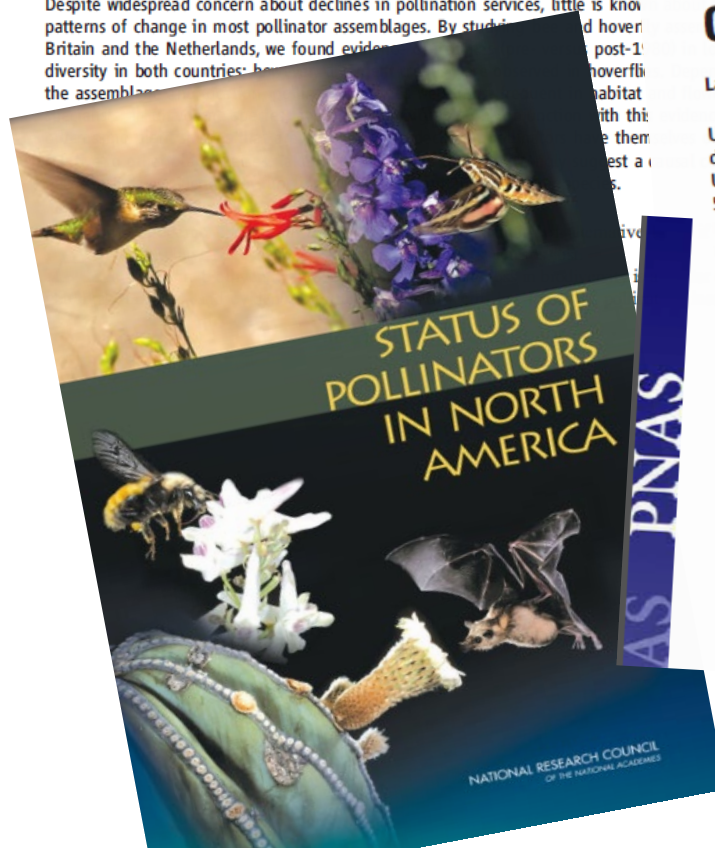
Sydney A. Cameron^{a,1}, Jeffrey D. Lozier^a, James P. Strange^b, Jonathan B. Koch^{b,c}, Nils Cordes^{a,2}, Leellen F. Solter^d,
and Terry L. Griswold^b

^aDepartment of Entomology and Institute for Genomic Biology, University of Illinois, Urbana, IL 61801; ^bUnited States Department of Agriculture-Agricultural
Research Service Pollinating Insects Research Unit, Utah State University, Logan, UT 84322; ^cDepartment of Biology, Utah State University, Logan, UT 84321;
and ^dIllinois Natural History Survey, Institute of Natural Resource Sustainability, University of Illinois, Champaign, IL 61820

Edited* by Gene E. Robinson, University of Illinois, Urbana, IL, and approved November 24, 2010 (received for review October 3, 2010)

Bumble bees (*Bombus*) are vitally important pollinators of wild
plants and agricultural crops worldwide. Fragmentary observations,
however, have suggested population declines in several North
American species. Despite rising concern over these observations
in the United States, highlighted in a recent National Academy of

study in the United States identified lower genetic diversity and
elevated genetic differentiation (F_{ST}) among Illinois populations
of the putatively declining *B. pensylvanicus* relative to those of
a codistributed stable species (19). Similar patterns have been ob-
served in comparative studies of some European species (8), but





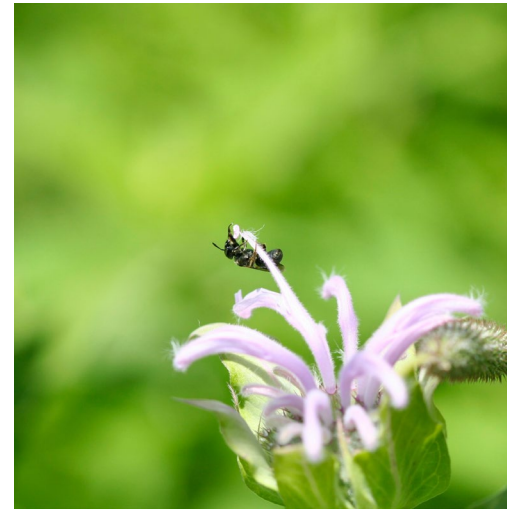
Drivers of Pollinator Decline



Habitat loss
and
degradation



Pesticide
use



Diseases and
pathogens



Climate
change



Rationale

- Help to ensure the survival of vital species crucial to our planet's functioning ecosystems
- Certification recognizes and celebrates our city's ongoing work on cultivating pollinator-friendly habitats and removing invasive plants
- Joins Bloomington's other existing certifications (Bird Town; Tree City),

...and partnerships: Project Wingspan and MC-IRIS,

...contributes to habitat conservation plan and map,

III was certified as a Bee Campus in Spring



Requirements and Responsibilities

- Future Digital home:
<https://bloomington.in.gov/parks>
- Parks Dept. Lead: Joanna Sparks (Urban Greenspace Manager)

Annual Requirements:

- Host pollinator events and outreach activities
- Install a sign (provided by Bee City USA), which will be maintained by the Parks and Recreation Department
- Annual report to Xerces submitted by Parks



Fiscal Impact

Annual Fee of \$400 (based on city population);
to be paid from the Environmental Commission's
budget, with assistance, if needed, from the
Parks and Recreation Dept.

Potential Cost Savings

- Access to materials for outreach
- Regular online workshops and trainings that will be made accessible to staff and commissioners
- Access to Xerces Society pollinator conservation and pesticide reduction staff. Affiliates are welcome to contact the Xerces



Questions?

Follow-up on Discussion of Downtown Gardens

Q1: Will the City be responsible for maintaining the lot after it's started? (Who will pay for anything that might be needed. Commissioner Caldie mentioned that it was supposed to be low maintenance and require very little.

This is a key question. The Master Gardeners Association currently maintains the garden on the north side of the square and the Wonderlab garden. Community service is part of their requirements for certification.

Q2: Any information on the specific plants or trees being added? Will the current tree remain in this plot?

Yes, attached are the plant lists Andrew has used in the past. The current tree will remain.

Q3: Any concerns about attracting deer?

I don't think so, but let me double check. Andrew's planting list generally avoids this.

Q4: Does Parks have anything similar planned for this space?

Nothing is planned for this space.

Q4: Will there be a place to sit or work within the greenspace?

Yes, We're hoping a bench will be installed or donated to sit under the tree.

Q5: This space is used by local residents as a dog waste area. What happens when this becomes filled with intentionally planted flowers/plants? How is this change going to impact residents (or the viability of the greenspace)? Would you add a few dog waste stations? Would that encourage more people to have their dogs pee on the plants? How do you anticipate what is needed to account for the current usage of the space?

Great point. I wasn't aware of this. What would you recommend?

Q6: Have you spoken with the church (First United Methodist) about supporting financially or with maintenance?

Andrew actually just did a garden for the First United Methodist church on the south side of their building. This is a good point, they might be willing to support financially or with maintenance. I've reached out to Andrew about this to start the discussion.

Spring:

Salvia 'Amethyst'
Salvia 'Crystal Blue'
Allium christophii
Salvia 'Lyrical White'
Achillea 'Pretty Belinda'
Iris 'Ruffled Velvet'
Allium 'Chivette'
Amsonia 'Basses Loaded'
Nepeta 'Cat's Meow'
Penstemon 'Huskers Red Improved'

Early Summer:

Stachys 'Cotton Candy' (Plus Standing Ovation?)
Nepeta 'Cat's Meow'
Salvia 'Lyrical White'
Geranium 'Rozanne'
Pycnanthemum flexuosum
Achillea 'Pretty Belinda'
Schizachyrium 'Standing Ovation'
Achillea 'Parker's Variety'
Salvia 'Amethyst'
Salvia 'Crystal Blue'
Prunella vulgaris 'Magdalena'
Asclepias tuberosa

Summer:

Echinacea 'Fatal Attraction'
Eragrostis spectabilis
Perovskia 'Little Spire', 'Sage Advice', 'Prime Time'
Pycnanthemum flexuosum
Liatris spicata 'Trailblazer'
Rudbeckia tri 'Prairie Glow'
Allium 'Summer Beauty'
Geranium 'Rozanne'
Schizachyrium 'Standing Ovation'
Origanum 'Rosenkuppel'
Calamintha nepeta subs. nepeta
Eupatorium maculatum 'Phantom'

Late Summer:

Sedum 'Carl'
Calamintha nepeta subs. nepeta
Vernonia 'Iron Butterfly'
Lobelia siphilitica
Eragrostis
'Phantom'
Huskers red improved
Solidago 'Golden Fleece'
Perovskia

Late Fall:

Standing Ovation
Aster 'Raydon's Favorite' or 'Twilight Sky'
Sedum 'Carl'
Pycnanthemum flexuosum

Spring:



Early Spring:



Summer:



Late Summer/Fall:



Late Fall:



Spring:

Penstemon digitalis 'Husker Red Improved'
Nepeta 'Cat's Meow'
Salvia 'Blue by You'
Salvia 'Ballerina Pink'
Baptisia 'Purple Smoke'
Salvia 'Lyrical White'
Zizia aurea
Achillea 'Sassy Summer Taffy'

Early Summer:

Stachys 'Hummelo'
Nepeta 'Cat's Meow'
Echinacea pallida
Veronicastrum 'Red Arrows'
Salvia 'Lyrical White'
Phlox 'Opening Act Blush'
Achillea 'Sassy Summer Taffy'
Digitalis ferruginea
Dalea purpurea
Geranium 'Rozanne'
Asclepias tuberosa
Penstemon digitalis 'Husker Red Improved'

Summer:

Allium 'Millenium'
Calamintha nepeta subs nepeta
Origanum 'Rosenkuppel'
Perovskia 'Prime time'
Echinacea purpurea 'Virgin'
Sesleria autumnalis
Bouteloua gracilis 'Honeycomb'
Heliopsis helianthoides 'Bleeding Hearts'
Phlox paniculata 'Fancy Girl'
Geranium 'Rozanne'
Eragrostis spectabilis
Sedum 'Autumn Joy'
Rudbeckia triloba 'Prairie Glow'
Schizachyrium scoparium 'Standing Ovation'
Limonium latifolium

Late Summer:

Lobelia siphilitica
Calamintha nepeta subs nepeta
Liatris scariosa
Penstemon digitalis 'Husker Red Improved'
Echinacea purpurea 'Virgin'
Sedum 'Autumn Joy'
Heliopsis helianthoides 'Bleeding Hearts'

Fall:

Sedum 'Autumn Joy'
Solidago 'Golden Fleece'
Calamintha nepeta subs nepeta
Aster 'Little Carlow'
Geranium 'Rozanne'
Schizachyrium scoparium 'Standing Ovation'

Spring:



Early Summer:



Summer:



Late Summer:



Fall:



Spring:

Salvia 'Back to the Fuchsia'
 Baptisia 'Prairie Smoke'
 Geranium macrorrhizum 'Ingwersen's Variety'
 Amsonia hubrichtii
 Zizia aurea
 Monarda bradburiana
 Salvia 'Blue By You'
 Nepeta 'Cat's Meow'
 Achillea 'Firefly Peach Sky'
 Phlox 'Fashionable Early Lavender Ice'
 Geum triflorum
 Gillenia trifoliata
 Penstemon 'Midnight Masquerade'

Early Summer:

Phlox 'Fashionable Early Lavender Ice'
 Asclepias tuberosa
 Stachys 'Hummelo'
 Veronica 'Seaside'
 Achillea 'Firefly Peach Sky'
 Nepeta 'Cat's Meow'
 Dalea purpurea
 Geranium 'Rozanne'
 Aruncus 'Horatio'

Summer:

Ruellia humilis
 Asclepias incarnata 'Cinderella'
 Liatris spicata 'Alba' (or 'Floristan White')
 Allium 'Summer Beauty'
 Echinacea 'Kismet Raspberry'
 Perovskia atriplicifolia 'Little Spire' (or 'Prime Time')
 Eragrostis spectabilis
 Geranium 'Rozanne'
 Eryngium yuccifolium 'New Moon'
 Rudbeckia triloba 'Prairie Glow'
 Origanum 'Rosenkuppel'
 Schizachyrium scoparium 'Standing Ovation'
 Echinacea purpurea 'Fragrant Angel'
 Scutellaria incana
 Pycnanthemum muticum
 Pycnanthemum tenuifolium
 Phlox paniculata 'Jeana'

Late Summer:

Sedum 'Autumn Joy'
 Vernonia 'Iron Butterfly' or 'Summer's Swan Song'
 Lobelia siphilitica
 Allium 'Lavender Bubbles'
 Pycnanthemum tenuifolium
 Schizachyrium scoparium 'Standing Ovation'
 Echinacea 'Kismet Raspberry'
 Perovskia atriplicifolia 'Little Spire' (or 'Prime Time')
 Rudbeckia subtomentosa 'Little Henry'
 Calamintha nepeta subs. nepeta
 Deschampsia cespitosa 'Goldtau'
 Chelone 'Tiny Tortuga'
 Eragrostis spectabilis
 Rudbeckia triloba 'Prairie Glow'
 Gentiana andrewsii

Fall:

Calamintha nepeta subs. nepeta
 Schizachyrium scoparium 'Standing Ovation'
 Perovskia atriplicifolia 'Little Spire' (or 'Prime Time')
 Chelone 'Tiny Tortuga'
 Sedum 'Autumn Joy'
 Solidago sphacelata 'Golden Fleece'
 Geranium 'Rozanne'
 Aster 'Little Carlow'
 Penstemon 'Midnight Masquerade'
 Anemone 'Whirlwind'
 Heuchera villosa 'Autumn Bride'
 Panicum virgatum 'Northwind'
 Aster novae-angliae 'Purple Dome'

Additional Shade Plants:

Heuchera 'Carnival Watermelon'
 Carex albicans
 Geranium macrorrhizum 'Ingwersen's Variety'
 Pulmonaria 'Diana Claire' (foliage)
 Helleborus 'Anna's Red'
 Pulmonaria 'Diana Claire' (flowers)

Spring:



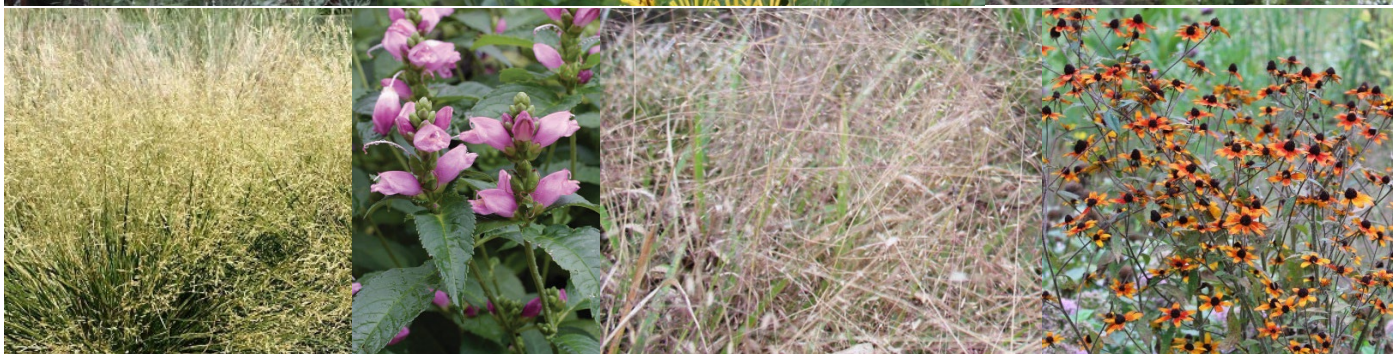
Early Summer:



Summer:



Late Summer:



Fall:



Additional Shade Plants:





Rachael Johnson <rachael.johnson@bloomington.in.gov>

New Map Lets Residents Identify Habitat Corridors Across Bloomington

Desiree DeMolina <desiree.demolina@bloomington.in.gov>

Wed, Jul 16, 2025 at 2:54 PM

To: Rachael Johnson <rachael.johnson@bloomington.in.gov>, City of Bloomington Communications <comms@bloomington.in.gov>



FOR IMMEDIATE RELEASE

July 16, 2025

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New Map Lets Residents Identify Habitat Corridors Across Bloomington

Bloomington, Ind. – The City of Bloomington has relaunched a new interactive [Habitat Connectivity Map](#) that allows residents to contribute directly to local conservation by pledging greenspace for wildlife conservation. The map identifies existing and potential habitat corridors, helping connect isolated natural areas across the city.

Developed by the City's Bloomington [Environmental Commission](#) in partnership with the [Planning & Transportation](#) and [Information & Technology Services](#) departments, the project prioritizes conserving habitat, linking fragmented areas through greenspace corridors, and enhancing habitat quality in urban and suburban areas.

Residents can participate by planting native species, removing invasive plants, and marking their efforts on the map. Even small contributions—such as planting a native garden, a rain garden, or a single tree—can help form larger habitat corridors through neighbors' combined efforts.

"This map is a powerful tool for visualizing how the community can contribute to restoring and connecting native habitats," said Rachael Johnson, Senior Environmental Planner with Planning & Transportation. "Together, we can improve biodiversity and make Bloomington more resilient."

Pledges will be shown on the map, creating a visible network of restored greenspaces between three Priority Greenspace Areas. The map is designed to inspire action, foster community pride, and highlight Bloomington's growing network of connected habitats.

To take the pledge and add your yard or greenspace to the map, visit bloomington.in.gov/boards/environment/habitat-connectivity.

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Bloomington Environmental Commission launches interactive map

By [Ian Collier](#)

Jul 28, 2025 4:31 pm · Updated Jul 28, 2025 4:31 pm

Early this July, Bloomington's Geographic Information's Department released an interactive Habitat Connectivity Map. Along with the city's Habitat Connectivity Plan, the interactive map seeks to promote environmental conservation through bio-diversity.

The map functions around three main "priority greenspace areas", defined by The Habitat Connectivity Plan as areas "contributing to plant and animal habitat, ecological diversity, healthy air, soil, water, reductions in energy use, and climate change mitigation."

The three main priority greenspaces in Bloomington are Griffy Lake, Clear Creek, and Jackson Creek. Around these areas, the map aims to highlight nearby geological features like Potential Corridor Links, which are areas that provide connection for organisms to priority greenspace areas. According to Environmental Commission Vice Chair Matt Caldie, corridors are key in the conservation of the environment.

"When we as a city develop land, we fragment the habitat for area plants and animals," Caldie said, "Some creatures – like maybe a hawk – can make it past our roads and buildings to another area of habitat, but other creatures – such as a grasshopper – might have to stay where they are. Corridors are essentially landscape features that allow for the movement of organisms between areas of habitat."

Individuals can mark existing or new habitat corridors, as well as native and invasive species in the area by making a pledge signaled by a diamond on the map. Users are able to add areas as specific as their backyard as greenspaces in the connected environment.

The map, which can be found on their **website**, lets individuals mark their own participation, but also seeks to inspire by showing other contributions by members of the community. This element excites the Environmental Commission: the ability for citizens to visualize their community interacting with the local area.

“The map may help encourage folks to take action in environmental stewardship and even see the contributions in their own neighborhoods,” Senior Environmental Planner Rachael Johnson said in an interview.

“As residents add their pledges to the map, we hope to see the diamonds representing the pledges start to look like bridges between those priority greenspaces,” Caldie added.

By going online and taking the “Habitat Connectivity Pledge,” Caldie believes Bloomington residents can inspire one another to participate in the conservation of the environment.

“Sometimes it feels like individuals can’t do much for the environment, but with a map full of participants, it becomes clear that we can accomplish a lot collectively,” he said. “So I hope it serves as a motivator, because as people see the environmental stewardship of others, it may empower them to do more and to share that energy (and the map) with friends, neighbors, or coworkers.”

<https://www.idsnews.com/article/2025/07/environmental-commission-launches-new-map>

Habitat Connectivity Map

Short Link: <https://bton.in/ECHCM>



Hopewell Brownfields Update

One naturally occurring element that is discussed at Hopewell, and that is arsenic. Arsenic is found in the soils of Indiana and can also be more concentrated in coal. Arsenic has also been used to treat lumber or used as a pesticide among many other things. Therefore, finding arsenic in the soils at Hopewell is not surprising, especially in an area starting at the northeast corner of Hopewell West and moving southeast through Hopewell East. This swath of land had contained a railroad track with coal storage near it. Along the area of the old railroad tracks, there are some higher concentrations of arsenic than what appears in other areas. The impact of this is in how those soils are managed and potentially on land usage. Investigations are still being completed and the Indiana Department of Environmental Management (IDEM) will be wanting an environmental restrictive covenant (ERC) on what limitations there will be and in which areas.

There are also petroleum related contamination in the northeast corner of Hopewell East (former bulk fuel storage facility) and the northeast corner of Hopewell West (former gas station).

Hopewell East

There have been around seven underground storage tanks (USTs) that have been removed for this portion of Hopewell. Five were in the northwest corner of Hopewell East (southeast corner of Rogers and 2nd Streets) which had contained a bulk fuel storage facility. Contaminated soils were removed from this entire area and replaced with crushed stone. That project was completed. Two other USTs were removed near the central portion of Hopewell East and final approval is awaiting from IDEM. In the northeast corner of Hopewell East there has also been a bulk fuel storage facility and some contamination is still present and will need to be further investigated and addressed prior to, or along with, development.

Hopewell West

Three USTs were removed near the Kohr building and final approval from IDEM is pending. There is an area of contamination in the northeast of Hopewell West where a gas station was once located. This area is being evaluated and there will likely be a cleanup.

Hopewell South

There were two USTs in the area and final approval from IDEM is pending. There was a house in the northeast corner of Hopewell South and some lead was found in the soil, likely from lead-based paint.

In summary, there are soil management requirements for much of Hopewell and there will be ERCs to be negotiated that may affect land use and development (nothing that cannot be incorporated into project(s)). I hope to keep the ERCs narrowly defined. There are some UST related areas that are pending final approval from IDEM.

**Records may be found at Indiana Department of Environmental Management
Virtual File Cabinet**

<https://www.in.gov/idem/legal/public-records/virtual-file-cabinet/>