

Pollinator species in decline

Pollinator species contribute significantly to seed and food production in flowering plants. Bees are among the most recognizable pollinator species, but other insects like monarch butterflies, moths, and animal species such as bats and birds contribute to flowering plant pollination as well. Three-quarters of the world's flowering plants rely on pollinator species for reproduction¹. The health and economic value of pollinator species cannot be understated: almost one-third of the human diet depends upon animal-pollinated plants, and the economic value of the honeybee to the U.S. agricultural industry has been measured at \$18.9 billion annually².

Pollinator populations across the nation and around the world are now in a measureable decline. There are a number of causes that have been identified as contributing factors in the decline of pollinator populations, including parasites and infections, extreme weather patterns, harmful pesticides and insecticides, and loss of native habitat for pollinators either due to land conversion or changing climate. Pesticides containing neonicotinoid compounds in particular are shown to induce disorientation or death in certain insect species. In August 2016, Governor Mark Dayton issued an executive order³ outlining significant restrictions on the use of neonicotinoid pesticides in Minnesota and underscoring the importance of pollinator species to the environmental and economic health of the state.

Pollinator programs for cities

Local governments can play a role in reducing pollinator decline by actively protecting or promoting pollinator habitat and reducing the use of toxic compounds that are shown to harm pollinator species. There are a number of existing pollinator initiatives and local advocacy groups that have been formed to encourage city government action. A summary of some of these key initiatives is included here. The City of Ramsey is not currently involved in any existing pollinator protection programs or initiatives, but may consider aligning with one or more of these programs as part of any action to support pollinator protection.

Mayors' Monarch Pledge

This National Wildlife Federation initiative specifically targets protections for monarch butterflies, a pollinator species whose population has declined ninety percent (90%) over the past two decades. The Pledge involves (1) a mayoral pledge commitment to protect monarch habitat and encourage citizen action, (2) a follow up from the City outlining at least three (3) specific actions that will be taken to protect monarchs, (3) taking action and (4) reporting on progress on a quarterly basis.

Humming for Bees

This Minnesota non-profit, volunteer-led effort that describes themselves as "dedicated to contributing to a sustainable future for bees and other pollinators" has partnered with local City Councils to pass "Bee Safe" resolutions. They assisted the City of Shorewood in developing the first bee-friendly city policy in the state, comprising a commitment to refrain from neonicotinoid use as well as planting clover on city

¹ <http://www.mda.state.mn.us/protecting/bmps/pollinators/morepollinators.aspx>

² <http://www.pollinator.org/Resources/NAS%20NRC%20selected%20quotes.pdf>

³ https://mn.gov/governor/assets/2016_08_25_EO_16-07_tcm1055-253931.pdf

property. The non-profit provides resources on their website for both cities and private citizens interested in taking action on pollinator protection.

Pollinate Minnesota

Started in 2015, Pollinate MN is a self-described advocacy group that offers a [comprehensive toolkit](#) for cities that are considering passing a pollinator-friendly resolution. The toolkit offers suggestions on what local government actions are the most effective and how to construct and augment policies that will work to enhance pollinator health and success.

Pollinator Friendly Alliance

Although this Stillwater-based organization largely targets citizen advocacy for pollinators, they have been involved in a number of pollinator demonstration projects or gardens in the metro area and support cities in their efforts to become pollinator friendly.

Existing pollinator efforts in Ramsey

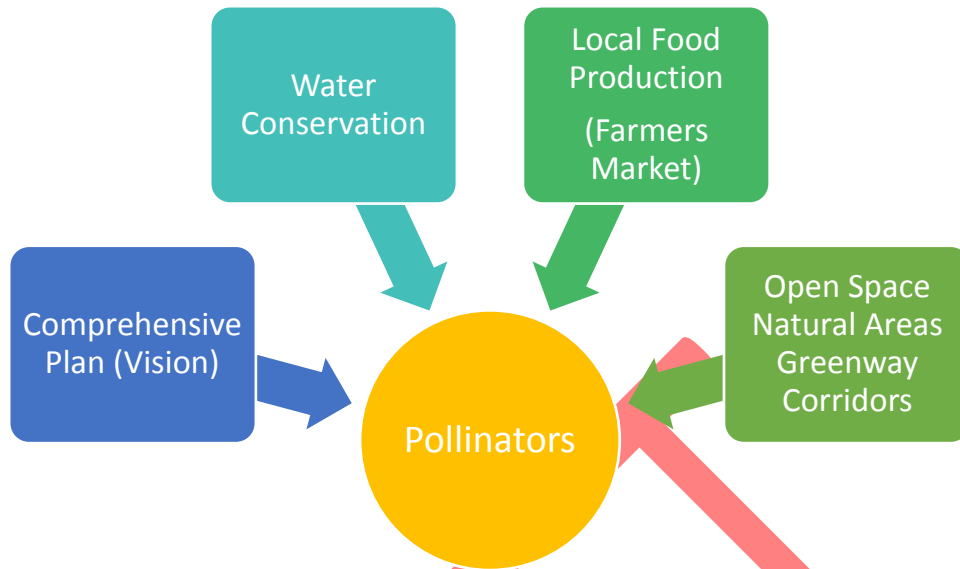
While the City of Ramsey has not made a formal commitment to protect pollinator species, it has certainly engaged in actions intended to directly support pollinators and their habitat. The City completed a Natural Resources Inventory in 2007 that incorporates both extent and quality of natural landscapes in the community, providing a baseline awareness of environmentally important areas and locations that may be ideal candidates for protection efforts to retain natural habitats critical for pollinators. Importantly, city staff has confirmed that that the City does not actively use neonicotinoid pesticides to manage insects in its parks or public facilities.

In 2016, the City approved a collaborative project to create a native prairie landscape along the Trott Brook Trail Connector. The project is primarily focused on bringing milkweed and liatris plantings, both food sources for monarch butterflies, to the area. The City has also supported efforts to bring native plantings to Ramsey Elementary School for their 4th grade classes to plant and maintain to expand a monarch friendly landscape.

Ramsey's City Code does include pollinator-friendly provisions. Native plantings are specifically differentiated from noxious weeds or nuisance vegetation definitions. Prairie vegetation is excluded from the plant height restrictions under the public nuisance section of code, and yards are permitted to include native plantings and/or establishment of native prairie. Ramsey provides information on the benefits from establishing prairie cover on its website. The City has also evolved its policy toward beekeeping from outright restriction, to conditional use, which carried a significant fee, to a beekeeping license with a reduced fee amount, reducing the barriers to beekeeping in the city.

Co-benefits of pollinator protection

Should the City of Ramsey elect to support pollinator protection, it will also promote a number of co-benefits ranging from environmental protection to support of the comprehensive plan. There are several ways in which pollinator protections align with existing City goals and initiatives.



Comprehensive Plan

The City's 2030 Comprehensive Plan acknowledges the importance of Ramsey's natural resources and environments, invoking the need to "respect the balance and connectivity between its unique urban, rural and natural environments" directly in the Plan's vision statement. The Plan also outlines a number of strategies to maintain native vegetation in the community, which provides vital pollinator habitat.

Water protection

Many practices that promote native landscapes also require less water for vegetative maintenance. Certain native plantings also provide greater storm water filtration and ecosystem services than typical turf grasses.

Local food production

A healthy pollinator population is required for flowering plant and food production, from small private gardens to large agricultural-scale crops. The City of Ramsey has a successful and growing farmers market and local foods movement. Supporting pollinator protections will also support farmers and gardeners who are providing locally-produced foods and goods to the community.

Open spaces and natural areas

Based on citizen surveys over the years, the natural environment and open space has been consistently identified as important to the community. Seeking opportunities to preserve natural areas seems to not only be consistent with the survey results, but would also provide protection for critical pollinator habitat. These open spaces and natural areas not only benefit wildlife, but also contribute to water quality, by slowing runoff and filtering sediment and pollutants before discharging into a water body and groundwater recharge, as the slower runoff results in greater infiltration.

Future pollinator action: What can Ramsey do?

Actions at the city level can have a significant impact, given that local governments are given wide latitude to regulate land use through zoning and other ordinances. As public landowners, cities can also

impact environmental outcomes considerably by implementing policies and practices that promote pollinators on their own properties. Local governments can also promote public education and awareness of the importance of protecting pollinators and their habitats by providing access to resources and examples of pollinator-positive actions to members of the community. The level of action a city could take can range from providing public resources (more passive) to conversion of park land into native habitat (more active).

There are a number of actions the City of Ramsey could take to formalize a commitment to protecting pollinator species. The following summarizes possible directions the City of Ramsey could take to actively promote pollinator protection. Most proposed actions could occur at little to no additional cost to the City.

Pass a Pollinator-Friendly Resolution

Ramsey could elect to join the fifteen (15) Minnesota cities that have passed pollinator resolutions intended to express support for pollinator protection and commit to pollinator-friendly practices. Example resolution items include elimination of neonicotinoid pesticides on publicly managed lands, piloting innovative pest management programs, incorporating native plantings in public spaces, and encouraging citizen stewardship and education.

Participate in Mayors' Monarch pledge

Taking the pledge requires following through on at least three (3) actions designed to protect monarch butterflies over the course of one year, and documenting progress toward those efforts.

Partner with a local advocacy group

Humming for Bees, Pollinate Minnesota, and Pollinator Friendly Alliance all provide resources for cities interested in supporting pollinator species including assistance in developing effective city resolution language.

Actively support public awareness & education

The City can support pollinator protection efforts by providing resources and links to community members who are interested in incorporating pollinator-friendly practices on their properties. With the permission of the landowners, the City could showcase exemplary properties that exhibit pollinator-friendly landscapes and practices as a demonstration opportunity to educate the community. There is a wealth of existing information regarding pollinators and native landscapes to support pollinators. Rather than 'recreating the wheel', the City could develop a webpage that serves as a repository of this information that is readily accessible by residents and businesses.

Promote Citizen Science efforts

Across the country, interested individuals and groups are engaging in observational studies and documentation of pollinator locations, behaviors, and habitats and are contributing to a large citizen-driven dataset tracking pollinator activity. The City should encourage and support citizen science efforts as they relate to pollinators and work to connect interested residents to the appropriate resources. This could be incorporated into the public awareness and education element as part of a webpage and can link to another entity such as [Journey North](#) that tracks citizen sightings of monarchs and milkweed.

Continue progressive reduction in beekeeping barriers

As restrictive hurdles at the city level towards beekeeping continue to be minimized, more residents may elect to promote pollinators by maintaining bee colonies on their own properties.

Make certain that City's vegetative stock does not derive from harmful pesticide use

Although the City does not use neonicotinoids directly in its parks or public facilities, it can take an extra step by researching whether its plantings come from a stock that is treated with the pesticides that have been proven harmful to pollinator species. If so, the City could look for alternative plant materials that have not been 'pretreated' with neonicotinoid and other systemic insecticides.

Continue to partner with local entities to support native plantings

The City can commit to aid in supporting, funding or facilitating projects that incorporate prairie or native plantings.

Consider conversion of underutilized park land to native plantings

The City can consider doing an inventory of existing, underutilized park and recreation land to discover where conversion to native or low-impact plantings may be appropriate.

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