COLRAIN POLLINATOR ACTION PLAN



Identifying and Expanding Wild Pollinator Habitat in the Town of Colrain

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The *Colrain Pollinator Action Plan* was developed with input from residents and Town committee members representing Colrain's Conservation Commission and Historical Society. Residents in attendance consisted of farmers, entomologists, land stewards, gardeners, permaculturalists, gardening educators, and seed savers who contributed valuable knowledge about pollinator habitat corridors and important sites for pollinators in Colrain, as well as key experience with the challenges and opportunities for expanding and protecting pollinator habitat. The continued engagement of the Town, the nascent ad hoc Pollinator Committee, as well as individual residents, the elementary school, and community groups will be essential to sustaining the long-term beneficial work for native pollinators in the many different opportunity areas in Colrain and beyond.

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INTRODUCTION

Franklin County communities are working together to proactively identify, create, and support pollinator habitat to respond to declining populations of native pollinator species. The *Colrain Pollinator Action Plan* is part of the *Regional Pollinator Action Plan for Franklin County*, an effort to identify and expand wild pollinator habitat at a municipal and landscape scale across Franklin County, Massachusetts, by mapping existing and potential pollinator habitat "corridors" and "stepping stones" that support local pollinators. The *Regional Pollinator Action Plan* includes a *Regional Pollinator Habitat Corridor Implementation Toolkit* and *Pollinator Action Plans* for the towns of Bernardston, Conway, Greenfield, Heath, Montague, Orange, Shelburne, and Wendell (developed in 2021), and Ashfield, Buckland, Colrain, Deerfield, and Shutesbury (added in 2024).

Pollinator Corridors Pollinators have different sized home ranges within which they must find nesting, food, and forage resources to complete their lifecycles. The smallest range is 500'. A pollinator corridor is a continuous area in which pollinators can meet their needs with minimal exposure to predators or hostile landscapes. Corridors can be developed to ensure that pollinator habitat is connected, rather than fragmented, which helps support populations, improve genetic diversity, and increase species resilience.

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Pollinator Stepping Stones

Pollinator stepping stones are isolated patches of pollinator habitat in which pollinators find vital nesting, food, and forage resources. Most native pollinators can range at least 500' between stepping stones when their habitat is no longer contiguous, and they will "step" between patches of habitat to meet their needs. Stepping stones can provide strategically important places for rest, shelter, and water in between corridors or other habitat. The closer the stepping stones are, the safer they are for pollinators to access, especially small-bodied species with smaller ranges. Stepping stones within 500' of each other can support the greatest diversity of pollinators.

To provide context for protecting and expanding habitat for wild, native pollinators, the *Regional Pollinator Action Plan* reviews the importance of pollinators and the significance of their decline. It also describes strategies for protecting and expanding pollinator habitat at the local scale and for coordinating pollinator work locally and regionally. The plan also includes additional resources for further research.

The *Regional Pollinator Action Plan* serves as a preface for each town's *Pollinator Action Plan*. In this way, each participating community can continue working on local goals within the broader context of Franklin County. With the same pollinator landscape analysis and pollinator-friendly strategies underpinning local level planning, each town will have an awareness of inter-jurisdictional pollinator habitat areas and the potential for overlapping open space, and recreational or green infrastructure projects in which pollinator habitat could be an important and exciting co-benefit. Keeping in mind the mutual goals, shared challenges and interests of neighboring communities, towns can find common ground and work together on innovative

projects. Partnerships will be key to working at the regional scale and to ensuring the physical continuity and ecological vitality of Franklin County's regional pollinator corridors.

The *Regional Pollinator Habitat Corridor Implementation Toolkit* supplements the regional plan by providing a number of planning and advocacy tools for local pollinator work and regional collaboration, including:

- A regional map showing pollinator corridors and stepping stones across the thirteen Franklin County communities that participated in this plan;
- o Model language for pollinator-friendly land use regulations;
- A set of landscape typologies to serve as replicable designs that guide pollinator habitat projects and plantings in five typical landscape settings (Urban/Village Center, Residential, Riparian Buffer, Meadow, and Agriculture); and for five transportation or stormwater management settings.
- A set of custom plant lists associated with each setting; and
- A "pollinator-friendly habitat" sign and a "leave the leaves" sign to help local landowners and land stewards communicate to the public about their pollinator-friendly landscapes.

To view the *Regional Pollinator Action Plan*, the *Regional Pollinator Habitat Corridor Implementation Toolkit*, and the *Pollinator Action Plans* for each of the other participating towns, go to <u>https://frcog.org/project/regional-pollinator-plan/.</u>

EXISTING POLLINATOR HABITAT & RESOURCE AREAS

Landscape Overview

Colrain is a very rural town with small villages scattered throughout town in the river valleys between hills. There are small parcels of Town-owned land, some of which are on the banks of the North River, on Greenfield Road, Main Street, and Foundry Village Road. Colrain is predominantly forested hills. Open landscapes are mostly found in the settled valleys of the East and West Branches of the North River and their tributaries, or on the more open, developed hills in the southeast corner of town. Agricultural activity is present in both of these areas. In addition to being home to the branches of the North River, Colrain is bounded on its east side by the Green River. While much of Colrain's population is settled alongside the branches of the North River, the Green River is predominantly forested and undeveloped.

BioMap Core Habitats are state-designated intact fish and wildlife communities, habitats, and ecosystems. All reaches of the North and Green Rivers and a number of their tributaries are listed as BioMap Core Habitat—state-designated high-quality habitat and intact ecosystem areas. Other areas mapped as BioMap Core Habitat are almost all on forested hillsides, likely where rare plants are present. There is a major utility corridor traversing Colrain north-west to south-east in the lower half of town, which although is not identified in BioMap habitat maps, does represent an important pollinator habitat area.

Landscape Analysis

Maps of existing and potential pollinator habitat sites and resource areas were developed through a combination of GIS landscape analysis and community input gathered at an in-person workshop. The components of each map used in the workshop, along with an analysis of existing habitats and resources areas, are summarized in this section.

Mapping Pollinator Land Cover and Land Use

According to the Natural Resources Conservation Service (NRCS), the best pollinator habitat will provide the pollinator with access to forage, cover, and water in close proximity, as well as connectivity to other important habitats, such as deciduous forests. Sunny and open conditions, field edges, hedgerows, and riparian zones tend to provide the most food, cover, and water, as well as nesting options for ground-nesting pollinators and stem-nesting pollinators.

Assessing land cover and land use most suitable for pollinators in the Town of Colrain included the following maps, which can be found at the back of the *Colrain Town Action Plan*:

- Land Cover and Land Use
- Pollinator Land Cover Land Use
- Pollinator Corridors & Habitat Stepping Stones

Existing pollinator habitats and resource areas can be inferred from the "Sunny Open Landscapes" and "Forested and Open Wetlands" data displayed in the *Town of Colrain Pollinator Land Cover Land Use* map. These two composite prime pollinator land cover data layers consist of the following MassGIS 2016 land cover types, which meet the characteristics described by the NRCS as beneficial for pollinators:

Sunny Open Landscapes
Cultivated
Pasture/hay
Developed open space
Grassland
Scrub/shrub

Forested and Open Wetlands Forested wetland Non-forested wetland

"Sunny Open Landscapes" and "Forested and Open Wetlands" serve as the basis for delineating pollinator corridors and stepping stones in the *Pollinator Corridors & Habitat Stepping Stones* map. Only isolated habitat areas within a quarter of a mile of other habitat areas or corridors are identified as stepping stones on the map so the viewer can better see where there is the most potential for creating or expanding corridors.

This map shows that there are several long, well-connected corridors, particularly those created by the Green River, North River, and powerlines. Good land stewardship and enhancement of pollinator food sources along these corridors are essential to pollinator protection in Colrain. There are several sunny and open corridors in the southeast corner of town, although they have limited connectivity to the center of Colrain and there are scattered pollinator stepping stones that would further benefit pollinators if they could be enhanced or better connected. The northwest corner of Colrain also holds scattered areas of sunny and open land that would further benefit pollinators if they could be enhanced.

Mapping Habitat and Environmental Resources & Permanently Protected Properties

The Permanently Protected and Municipal Properties map for Colrain was developed with MassGIS

The *Habitat and Environmental Resources* map for Colrain was developed with MassGIS and other available geospatial data to identify development patterns, water resources, utility

corridors, and important habitat areas based on MassWildlife and The Nature Conservancy's BioMap Core Habitat;¹

The following landscape analysis maps can be found at the back of the *Colrain Town Action Plan*:

- Permanently Protected and Municipal Properties
- Habitat and Environmental Resources

Mapping Pollinator Sites

A pollinator planning workshop with residents and interested parties in Colrain was held on October 2, 2023, in person at the Colrain Highway Garage. Seventeen people participated in Colrain's workshop. Workshop participants were invited to look at the pollinator land cover land use, permanently protected, and habitat and environmental resources GIS maps created by FRCOG staff (discussed in the above sections) as a starting point for inventorying locally known existing pollinator habitats as well as potential locations for creating new pollinator habitat in town based on the pollinator habitat corridors and stepping stones framework. Workshop participants were encouraged to identify whether Town-owned parcels could be used to enhance connections, and identifying areas such as roads, power line right-of-ways, and recreation areas managed by State and federal groups that could provide additional connecting corridors.

One map was produced based on the knowledge shared at the workshop, which can be found at the back of the *Colrain Town Action Plan:*

Existing & Potential Sites of Pollinator Habitat

Existing Habitat & Resource Areas

With the assistance of the landscape analysis maps, Colrain residents identified different landscapes where pollinator habitat is more commonly found in Colrain. Specific habitat locations are listed where they are known. In Colrain, villages, residential gardens/fields/meadows, public parcels, and utility corridors are important pollinator habitats rich in forage and other resources. Other important existing habitat areas that provide water, forage, and nesting/overwintering include farmland, riparian areas, and forests. Specific

¹ <u>https://biomap-mass-eoeea.hub.arcgis.com/</u>

BioMap Core Habitat is areas critical to the long-term conservation of our most vulnerable species and their habitats. MassWildlife and The Nature Conservancy released an updated BioMap tool in November 2022. The mapping provides the latest scientific data and resources to help state and local governments, land trusts, non-government organizations, and other conservation partners strategically plan projects to conserve wildlife and their habitats. BioMap combines more than 40 years of rigorously documented rare species and natural community records from MassWildlife with cutting-edge climate resilience data from The Nature Conservancy and spatial data.

existing habitat locations are bolded in the following text and, when representing a single location, are indicated in red on the *Existing & Potential Sites of Pollinator Habitat* map.

Residential Gardens, Fields, & Meadows

Colrain is home to a large number of gardeners, home-scale farmers, and residents with open fields with field-edge or meadow habitat. Many of these home gardeners share the goal of creating native pollinator habitat on the land that they steward.

Most of Colrain's nine historic village areas are often pockets of open land composed of residential lawns and gardens, farmland, unmown meadow areas, and sometimes cemeteries. Most are also located along branches of the North River or the Green River, which enhances their value as habitat because the river is a constant source of fresh water and because pollinators can travel along the riparian corridor to the next village. Colrain's seven village areas are:

- Colrain Center
- Foundry Village
- Lyonsville
- Griswoldville
- Elm Grove
- Shattuckville
- Adamsville
- Stewartville

Participants at the 2023 Colrain Pollinator Habitat Workshop identified the following residential areas outside of villages as having important pollinator habitat:

- Residential gardens along West Leyden Road
- Biodiverse meadows in the neighborhood of East Colrain Road and Nelson Road
- Field and meadow habitat on Shearer Road
- Field and meadow habitat on Wilson Hill Road and Purington Lane
- Abandoned hayfield on west side of Route 112 near intersection with Thompson Road
- Field, meadow, and wetlands habitat on York Road good stand of milkweed
- Stowe Farm Co-housing pollinator planting along length of field
- Valley Community Land Trust pond and field

Many gardeners have also created smaller pockets of pollinator garden habitat sprinkled across town. Many of these gardeners are active with the Colrain ad hoc Pollinator Committee and are eager to share knowledge and resources.

Public Parcels

The **Colrain Elementary School** installed a 20-by-20-foot pollinator garden in the spring of 2021 and fall of 2023. Many plants were donated to by residents to the garden. Under the guidance of a dedicated teacher, the students have taken ownership over the garden. The garden is located just beyond the preschool playground, across the East Branch of the North River from the newly established pollinator planting on the hillside just north of Veteran's Park.

After many months of planning, a pollinator garden was installed on the **hillside below Veteran's Park** in the early fall of 2024. The Franklin Conservation District provided financial assistance to purchase the plants and to hire the designer, Abound Design. The Colrain ad hoc Pollinator Committee organized volunteers to do prep work on the site, organized 15 volunteers to install the garden on planting day, and organized volunteers to water the plants. The Town has promised to mow around the garden to help keep weed pressure down.

The Town owns and maintains a **ballfield on Foundry Village Road**, bordering the East Branch of the North River, on each side of which are unused fields.

The Green River Wildlife Management Area (WMA) contains open fields along West Leyden Road mowed by MassWildlife for hunting. These fields supports a healthy population of goldenrod, an important source of pollen in the fall.

Utility Corridors

Colrain contains **three powerline corridors**, one of which is very wide. Power companies maintain their rights-of-way (ROWs) for the power lines to keep them free of interfering brush and woody vegetation. These continuous, open sunny corridors can offer ideal nesting habitat and a cornucopia of food if native plants are allowed to remain within the utility ROW. The common practice of using herbicides in utility corridors to manage tree and shrub growth indiscriminately kills native vegetation when applied by broad spraying, which destroys the desired plants for wild native pollinators. Practices can be developed that would allow for both effective maintenance of the ROW as well as pollinator habitat. Areas where streams and rivers, isolated wetlands, scrub/shrub lands, and open cultivated areas overlap with the utility and highway corridors area especially valuable for pollinators. Refer to Utility Corridors and Improving Infrastructure Maintenance in the *Regional Pollinator Action Plan* for more information on both the potential and challenge of utility corridors.

Farmland

Checkerspot Farm is a native plant nursery located on the old Brigham Farm on Route 112, just north of town center. In addition to selling plants, the farmers give tours of their pollinator meadow and direct customers toward consultant services.

Pine Hill Orchards is a family-owned orchard growing apples, peaches, plums, blueberries, pumpkins, and more. Located on Greenfield Road in south Colrain, just north of the Shelburne border, the farm is situated in a more heavily agricultural area corner of Colrain, where the abundance of fields offer some agricultural habitat (where not impacted by pesticides) and lots of potentially rich edge habitat.

Shoestring Farm is a small vegetable farm and maple sugaring operation located on Ed Clark Road that follows organic practices.

Sunrise Farms is a maple syrup producer.

Other farmland, used predominantly for hay, conventional corn, or pasture, is located along the East and West Branches of the North River.

Riparian Areas

Rivers, streams, lakes, and ponds are important pollinator habitat for a variety of reasons. They are partially or fully open to the sun, supporting a diversity of flowering woody and herbaceous plant species. Certain native pollinators may be specifically adapted to the unique "riparian", or waterside, plants that prefer the presence of water and hydric soils. These waterbodies provide needed water and the sandy and clay substrates that make up beds, banks, and floodplains can provide nesting habitat for ground-nesting bees. With their continuous edge habitat, rivers, streams, lakes and ponds are natural corridors and/or stepping stones that support pollinator movement. Unfortunately, invasive plants like Japanese knotweed are readily choking out native pollinator plants along rivers and streams throughout the region.

The following waterbodies are important for pollinator habitat in Colrain:

- Green River
- North River, including the East and West Branches, where knotweed has not colonized
- McLeod Pond in Catamount Forest
- Wetlands in Shelburne Falls Fire District land on Colrain's southern border east of Route 112

The East Branch of the North River is wider and more agricultural than the West Branch. An area along the East Branch of the North River was replanted with native plantings in 2020 where an ecological restoration and riverbank stabilization project was implemented. Participants in the Colrain Pollinator Habitat Workshop also specifically called out the riverbank between the bridge to the south and the Elementary School to the north as existing pollinator habitat.

Forests

The Green River is unique in Colrain because it is heavily forested and—with the exception of an unpaved road and a few houses—largely undeveloped. Part of this forest is protected Green

River WMA, which contains contiguous forest from Green River to West Leyden Road, where the state mows open fields for hunters that supports a healthy population of goldenrod. In addition to the approximately six-mile stretch of water and riparian resources it offers, pollinators benefit from resources that are found only in forests, including tree flower pollen, dead wood for nesting, tree resins, and various non-floral sugar sources (e.g. honeydew).

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Colrain Pollinator Habitat Workshop participants identified that there are a few clearings created by logging remaining in the **H.O. Cook State Forest**. These clearings diversify the resources needed by pollinators, and provide stepping stones through the forest between open areas in north Heath and open areas along the West Branch in western Colrain.

OPPORTUNITIES FOR EXPANDING POLLINATOR HABITAT & RESOURCE AREAS

The *Pollinator Corridors & Habitat Stepping Stones* map shows a series of well-connected pollinator corridors as well as isolated stepping stones of connectivity between pollinator corridors in Colrain. The quality and connectivity of existing pollinator habitat may be enhanced at the sites labeled "Potential Sites" on Colrain's *Existing & Potential Sites of Pollinator Habitat* map, which represents an inventory of locations that workshop participants saw potential in for creating new pollinator habitat. The areas indicated as stepping stones on Colrain's *Pollinator Corridors & Habitat Stepping Stones* map also represent key locations for expanding pollinator habitat. This strategy is beneficial because it expands the size, quality, and physical proximity of pollinator habitat areas to one another, which helps more pollinators meet their life cycle needs.

Pollinator habitat can be expanded through general practices, not just habitat cultivation. For example, Colrain homeowners and stewards of large parcels of land can adopt pollinator-friendly landscaping practices that provide food and nesting and overwintering habitat, or actively work to protect and enhance native-plant biodiversity where it remains. Whatever the strategy, expanding existing and implementing new pollinator habitat in Colrain will be accomplished by bringing together pollinator informed and dedicated volunteers, Town staff and the Highway Department, and land stewards managing forests and open space, working together to pursue opportunities, and building upon the many assets and strengths of Colrain and the greater region.

Prime Opportunity Areas

According to participants in the Colrain Pollinator Habitat Workshop held October 2, 2023, Colrain's prime opportunities for expanding pollinator habitat are with Town-managed properties, private gardeners and property owners, and local farmers and farmland owners. Other opportunity areas include riparian areas, recreation trails, roadsides, and solar installations. Specific potential habitat locations are bolded in the following text and indicated in orange on the *Existing & Potential Sites of Pollinator Habitat* map.

Town-Owned Parcels

The Town of Colrain and the Colrain Fire District own open space parcels throughout town in the form of parks, cemeteries, and municipal facilities. The potential habitat areas on town-owned parcels include:

- **Griswold Memorial Library:** the library obtained \$35,000 to redesign the property to reconfigure the parking; the long-range plan is to do no-mow out front and a pollinator garden out back
- The **Pitt House** property, home to the Colrain Historical Society
- A portion of the Town field on Foundry Village Road
- Branch Cemetery
- Site of the former Town Hall, where the broadband box is located
- Around the Town Office
- Colrain Fire District water supply land on Route 112, across from Checkerspot Farm
- Transfer Station
- Veteran Memorial Park is currently minimally landscaped by preference of town veterans. If veterans were to be interested in adding pollinator plants to the site, there is ample space.

The challenge for Town of Colrain-owned properties, as in most of our region's towns with tight municipal budgets, is that the Town doesn't have the staff to maintain additional areas of pollinator habitat. Given the special nature of pollinator-friendly landscapes, including differences in how they are maintained and how that different maintenance approach might need to be communicated to the public, the work of expanding pollinator habitat would ideally rely on a dedicated group, such as the ad hoc Colrain Pollinator projects in Colrain. The Town contracts out much of the mowing and weed whacking on Town-owned properties to a private landscaper. This landscaper has been asked to mow and trim around the new pollinator plantings on the hillside below Veteran's Park in order to reduce weed pressure on the new garden.

Refer to the Local Strategies for Enhancing Pollinators section of the *Regional Pollinator Action Plan* for information about landscaping for pollinators. See also the Urban and Residential plant lists and site typology designs in the *Regional Pollinator Habitat Corridor Implementation Toolkit*.

Residential Gardens, Fields, and Meadows

Many in the Colrain community are already very interested and engaged in creating and stewarding local, native pollinator habitat, and they want other community members to know that more habitat is needed, even in a rural place like Colrain. Continuing to build upon the momentum and the collective capacity among residents to carry out this work is an important long-term strategy. Although reducing mowing, leaving leaves and woody nesting material, and planting native plants in one's own yard is a very easy and low-stakes transition to make, some residents do not feel equipped with the knowledge and resources they need to do this. Participants at the Colrain Pollinator Habitat Workshop had ample ideas for how to support other residents in enhancing pollinator habitat, as described in the Education section of Strategies, below.

Multiple residents of the **Valley Community Land Trust** co-housing were present at the workshop and identified their property as an area where pollinator habitat could be improved. No other specific residential areas were called out.

For private property owners who may not already be considering pollinator habitat needs, the plant lists and site typology designs available in the *Regional Pollinator Habitat Corridor Implementation Toolkit* can support private landowners in taking that extra step toward pollinator-friendly practices. Refer to the Local Strategies for Enhancing Pollinators section of the *Regional Pollinator Action Plan* for information about landscaping for pollinators.

Farmland

Some farms in Colrain are actively promoting pollinator habitat in their cultivation and land management. Still, residents acknowledge that there is room for improvement in farming practices to be even more pollinator-friendly. Pollinator-friendly cultivation and land management strategies such as cover cropping, riparian buffers, hedges, and pollinator strips are practices beneficial to both soil and water health, in addition to pollinators. All Colrain farms have potential to enhance their benefit to pollinators; the farms mentioned in the Existing Habitats and Resource Areas sections were potential habitat areas identified in the pollinator workshop.

Refer to the Agriculture section of the *Regional Pollinator Action Plan* for more information about farming and land management practices and available grant funding that benefit pollinators. Refer also to the Agriculture plant list and site typology design available in the *Regional Pollinator Habitat Corridor Implementation Toolkit.*

Other Opportunity Areas in Colrain

The following areas also offer great potential for expanding and enhancing Colrain's pollinator habitat through general approaches and practices to enhance local ecosystems with native plants.

Riparian Areas

The multifold benefits of the land around rivers, streams, lakes, and ponds include sun, water, forage, nesting habitat, and long distances of habitat. While there are already many riparian corridors that function well as bee habitat, others are compromised by the presence of invasive plant species, especially Japanese knotweed.

See Invasive Species Control in the *Regional Pollinator Action Plan* for information and resources on prioritizing and managing invasive species. See also the Riparian Buffer plant lists and site typology design in the *Regional Pollinator Habitat Corridor Implementation Toolkit*.

Recreational Trails

Hiking and other kinds of recreational trails can act as pollinator corridors, as they often provide continuous paths with "edge" conditions that provide forage and nesting and that run through natural environments, similar to riparian areas. Colrain has a wealth of hiking trails in its two state forests and other trails, such as the ridge trail that runs through the contiguous forest north of the center of town, east of Route 112. The connectivity benefits of trails can be augmented by the presence or creation of open and sunny patches along the trail that provide food and nesting sites safely off of the traveled path.

Roadsides

Like recreational trails, paved and unpaved roads in rural parts of Colrain can also be especially good pollinator habitat because of the 'edge' conditions that they create in which wild pollinators can find food and nesting, and can travel along the continuous pathways roads offer between larger habitat areas. The sand and gravel substrate of the rural unpaved roads is itself an attractive medium for ground-nesting bees. Impact from vehicular traffic and road maintenance is, of course, a risk.

The Colrain Highway Department is in charge of much of the landscape maintenance on Townowned transportation right-of-ways. Modifying mowing practices or managing existing roadside edges to serve as corridors for pollinator movement could create effective and important habitat connections for native pollinators, which may otherwise be difficult to establish. For example, limiting roadside mowing to a narrow road-edge strip can leave habitat for pollinators while meeting safety requirements.

Refer to the Roadside Mowing section in the *Regional Pollinator Action Plan* or the Roadside Mowing factsheet in the *Regional Pollinator Habitat Corridor Implementation Toolkit* for information about adjusting mowing practices.

Solar Installations

Ground-mounted solar is often sited in open habitats that benefit native wildlife and are advantageous places to manage for pollinator habitat because they equate to very large areas of contiguous sunny, dry, open space where flexible mowing needs can accommodate pollinator life cycles. Although Colrain is not home to any large, ground-mounted solar projects, it could be in the future.

A discussion of how ground-mounted solar installations are prime opportunities for pollinator habitat can be found in the *Regional Pollinator Action Plan;* pages 16- of this town plan

recommends zoning bylaw language Colrain could adopt for solar installations that reinforces pollinator habitat [ZONING RECOMMENDATIONS WILL BE INCLUDED IN THE FINAL PLAN]. See also the Meadow plant list and site typology design in the *Regional Pollinator Habitat Corridor Implementation Toolkit*.

STRATEGIES FOR IMPLEMENTATION

Coordination & Partnership

Improving pollinator habitat in a community necessarily involves a variety of collaborators. As discussed in the *Regional Pollinator Action Plan* and throughout this plan, even though pollinator habitat areas can be resilient and low-maintenance landscapes, creating and managing them over the long-term can require awareness, labor, time, and money.

Volunteer-led Efforts

In Colrain, coordination and collaboration will likely rely on a mix of Town staff, Town committees, residents, local farms, and other businesses or organizations. The Town of Colrain formed an ad hoc Pollinator Committee in the summer of 2023, and the committee recruited a number of residents to the committee during the September 2023 Pollinator Habitat Workshop.

This committee planned, and in the fall of 2024, installed a new pollinator planting and educational signage on the hillside just north of Veteran's Park. A few community members volunteered for planting who had not been involved in the October 2023 workshop or pollinator educational events or planning meetings who have become more engaged in pollinator efforts as a result of this committee's efforts.

There is a broad range of work that this committee could take on, including local policy advocacy, conservation work, hands-on landscaping, and public education. With any pollinator expansion projects, Town staff should be involved from the beginning of any project to ensure their approval and proper oversight. In addition, if there were to be a number of pollinator projects, project leaders would need to carefully consider the capacity of volunteers and Towns to manage and maintain these projects for long-term success before each new project.

Regional Resources

Pollinator groups in neighboring towns that have a head start on the Colrain Pollinator Committee, such as Greening Greenfield or Pollinate Conway!, are invaluable resources to Colrain as they get started with pollinator initiatives. These groups have experience in areas like working with the municipality, coordinating with the Highway Department or Department of Public Works (DPW), running educational events, and installing demonstration gardens. Colrain can learn from others to reduce time spent developing best practices and learning from mistakes. Small things like knowing which companies to use for informational signage can save a lot of time!

Thanks to new grant funding, the Franklin Conservation District emerged in 2023 as a regional partner for pollinator work. Their Yard-by-Yard native plant project is currently working with a

small selection of Franklin County Towns to install pollinator habitat on municipal and residential properties, and may expand to other towns.² The Conservation District's ongoing education on soil health, water health, and pollinator health is accessible to all and their partnership with Checkerspot Farm may continue to provide rich local educational opportunities.

Education and Skill-building

Colrain's Pollinator Habitat Workshop had a number of Colrain residents with pollinator and landscaping expertise already in the room, including two native plant propagation and care professionals working at nurseries, a landscape and nursery education programs manager at a local college, and an entomologist doing research locally. Workshop participants recognized what a privilege it is to have local expert knowledge in the community.

Workshop participants identified the following topics for community education:

- Seeing wild, native plantings and habitats as both healthy and beautiful
- Pollinator-friendly landscape techniques, such as mowing regimes, spring and fall cleanup strategy, and planting
- Seed-saving techniques and facilitate seed swaps
- Dealing with invasives
- Hyperlocal ecotypes

Educational outreach to the Colrain community can consist of organized events, such as workshops and garden tours, or passive educational spaces such as demonstration gardens. Workshop participants discussed having informational workshops, skillshares, and garden tools as modes of connecting with community learners. The Historical Society's annual garden tours are an existing program that could incorporate pollinator-focused gardens and pollinatorfriendly farms. The Griswold Memorial Library would also be an ideal space to host workshops once the landscaping project is complete. Participants also expressed interested in ongoing workshops for the county or the bioregion to hear what other towns or organizations are doing, helping to adopt the latest best practices and technologies without having to do all of the research themselves.

Demonstration pollinator habitat sites can be set up wherever there is a good example of pollinator habitat by creating and installing educational signage. QR codes that link to more information are currently a popular way to link to more extensive information when there is only a small amount of signage area. Big signage that can be seen from a car is a strategy for catching the attention of people who wouldn't otherwise stop.

² <u>https://franklinconservationdistrict.org/native-plants-projects/</u>

Policy

Workshop participants pointed out that many Towns in western Massachusetts have also published non-binding resolutions enforcing the protection of pollinators and enhancement of pollinator habitat, which serves as a guide to the community in encouraging the adoption of policies and practices that support pollinator health, particularly through reducing the use of pesticides.

The *Summary of Implementation Strategies in Colrain* table lists both the opportunities and ideas brainstormed during the Colrain pollinator planning workshop and some general recommendations for expanding pollinator habitat in town.

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Opportunity	Strategy	Location	Jurisdiction	Potential Partners
	Support the efforts of the ad hoc Colrain Pollinator Committee.		Public	Volunteers, Town
	Foster good communication between the Committee and the			Administrator, Select
	Town.			Board
	Support the Library Trustees in following through with their plan	Griswold Memorial	Public	Colrain Pollinator
	to install native pollinator plants and a no-mow lawn in the	Library		Committee, Town
	upcoming parking reconfiguration and landscape renovation			Administrator
	project.			
	Build relationships with the Town Highway Department so as to		Public	Colrain Pollinator
	better understand the attitudes, limitations, and needs of Highway			Committee
Coordination	Staff and where there could be effective partnership with			
Coordination	pollinator habitat (i.e. equipment, water access, provision of wood			
& Partnership	chips, hauling of plant material, etc.)			
	Facilitate the availability of native pollinator plants for all		Private/Town	Colrain Pollinator
	residents, for example through plant or seed exchanges, bulk			Committee, (relevar
	purchase of native pollinator plants from local nurseries, or			Town official if a
	through a plant swap depot.			depot is created)
	Develop an invasive plants task force to address monitoring and	Town wide; particular	Public/Private	Volunteers, Colrair
	control of invasive plants on Town properties and roads, for the	concern for Japanese		Pollinator Committe
	benefit of native plants and co-benefits of wildlife habitat and	knotweed along the		Conservation
	climate resilience. Where possible, address issues on private	North River.		Commission,
	property, particularly along rivers.			Highway Departme

Coordination & Partnership	Follow the work of Greening Greenfield and other neighboring community-led pollinator groups to learn best practices and lessons learned for pollinator initiatives.		Private	Colrain Pollinator Committee
Education & Skill-building				
Education & Skill-building	Provide education to the community on pollinator habitat and protection via a range of educational strategies, including but not limited to talks, workshops, garden or nursery tours, plant or seed exchanges, plant identification resources, site visits, educational materials, social media, and websites.		Private/Town	Colrain Pollinator Committee, Western Massachusetts Master Gardener Association, Massachusetts Pollinator Action Network
	Install educational signage about native pollinator habitat and protection into highly visible public spaces.	Privately and publicly owned public spaces, the Griswold Memorial Library and Veterans Park	Private/Town	Colrain Pollinator Committee, Town Administrator, Conservation Commission, Highway Department
	Support the Highway Department and School District staff in adopting pollinator-friendly mowing, invasives management, and spring/fall landscaping practices; see resources available in the <i>Regional Pollinator Action Plan</i> and <i>Toolkit</i> .	Town Roads	Public	Colrain Pollinator Committee, Town Administrator, Select Board
	The Agricultural Commission can reach out to farmers and farmland landowners to encourage pollinator habitat on farms and orchards, providing information on plant species, mowing strategies, seed and plant sources, invasive species management, and grant funding.	Active and abandoned farmland	Private	Colrain Pollinator Committee, Agricultural Commission, NRCS, farm owners, farmland owners
	Farmers who are interested can reach out to the local NRCS office to learn about conservation practices NRCS will fund for pollinator habitat.			

	Continue to identify opportunities for the installation or protection	Townwide	Private/Public	Colrain Pollinator
	of pollinator habitat on Town and private properties.			Committee, Town
				Administrator,
				Highway Department
	Consider a campaign for establishing an official pollinator corridor	Area of Town to be	Private/Public	Colrain Pollinator
	on public and private lands that can be publicized and celebrated	identified		Committee, Town
	in town.			Administrator,
Planning				Highway
				Department,
				residents
	Include a high proportion of pollinator plant species in any park	Colrain Town Properties	Public	Town Administrator,
	redevelopment projects or road construction projects. If the Town			Select Board,
	doesn't have funds to purchase pollinator plants, it could consider			Highway
	receiving donations from the community.			Department,
				Volunteers
Funding	Consider the adoption of the Community Preservation Act as a		Public/ Annual	
	means for incorporating pollinator plantings into public projects.		Town Meeting	
Policy	Support the Planning Board in adopting recommendations for		Public	Planning Board,
	potential changes to Colrain Zoning Bylaws and Subdivision			Residents
	Regulations that support pollinator habitat.			
	Incorporate into the language of conservation restrictions that the	Potential conservation	Private/Public	Landowners, Land
	restriction holder holds the right to plant and manage pollinator	land		Trusts
	habitat within the area of the restriction.			
	Adopt non-binding Town pollinator protection resolution,		Public/ Annual	Town Administrator,
	particularly one that reduces the use of pesticides.		Town Meeting	Residents



