

## DURHAM, NH New England's First BEE CITY USA

by Melissa Moore



Forty years ago, Durham, NH, a seacoast town with a keen interest in protecting the environment, became NH's first Tree City USA. The town's most recent achievement protects pollinators: on February 6, 2017, Durham was recognized as a Bee City USA, the first in the Northeast. Durham never rests on its many laurels. This community keeps evolving and adopting new land stewardship practices. The residents share a strong belief in protecting and preserving their natural resources. Todd Selig, Durham Town Administrator, reported, "Sustainability and resiliency are important to us." They pursue these concepts in many varied ways.

In 2016, Durham's 640 kw solar array went online and now provides all the energy needed by Durham's town buildings, with the exception of the

wastewater treatment plant which still draws additional power. A substantial portion of land owned by the town of Durham, and/or the University of NH (UNH) is protected permanently through conservation easements. This ensures that the beauty of the landscape isn't dramatically changed, as the town is home to the state's largest university. Demand for student housing looms large, creating pressure for future housing developments.

Durham enjoys a unique geographic location. A significant amount of Durham's waterfront acreage is on Great Bay, home to the Great Bay National Estuarine Research Reserve. The Lamprey River, within the town limits, has been designated a "Wild and Scenic River" by the National Park Service.

Lee Alexander, a hobbyist beekeeper and Research Associate Professor Emeritus, spearheaded the effort to win the Bee City USA designation. Durham joins 72 other Bee City USA affiliates around the country. The program launched in 2012 when Asheville, NC became the inaugural Bee City USA. Now these pollinator friendly communities have spread coast to coast, with a majority located in North Carolina. The Bee City USA program joined forces with the Xerces Society in June 2018. It's a perfect union, as the two organizations have compatible missions to preserve and protect pollinators worldwide.

How does a town or city become recognized as a Bee City? The application process requires working with

town boards, a \$200 application fee, an annual report, and year-round educational and promotional initiatives to promote pollinator conservation. A key component in the process is designating a local government organization as a sponsor. In Durham, the Agricultural Commission is the designated sponsor. NH created the opportunity for municipalities to create non-regulatory Ag Commissions in 2007. Durham's Ag Commission currently has seven members with five alternates. Lee Alexander, an Ag Commission member, reported, "It's not like you earn the designation and then say we're done." The Ag Commission works throughout the year to promote pollinators.

Educational programs at the library encourage homeowners to rethink their lawn mowing practices. Patrons at the library receive free bookmarks



Bee City USA sign in Durham



Lee Alexander inspecting hives





Lee and Elaine Alexander in their pollinator garden reviewing the bee balm

with practical tips for "Five things You Can Do to Bee-Friendly to Pollinators." The top five recommendations encourage homeowners to "Re-think your lawn, plant flowers and herbs that attract bees, plant fruiting trees and shrubs, favor the growth of native trees and shrubs, and 'bee aware,' there are many types of bees." In addition to honey bees, many species of bumble bees and other native bees are part of NH's ecosystem. The threat of stings is clarified with the following statement: "Most bees are not aggressive, while wasps, hornets, and yellow jackets can be."

This spring, Alexander launched a Dandelion Contest and awarded honey to the homeowner who resisted mowing during the dandelion flow and whose lawn had the most blooms. The Ag Commission sponsors a float in the Memorial Day Parade and this year people were encouraged to dress in costume for the event. Bee antennas were popular as well as black and yellow attire.

August 18, was Durham's 6th Annual Farm Day presented by the Durham Agricultural Commission. The public was invited to tour participat-

ing family farms, two UNH Research Farms, and participate in a walking tour of Durham's Food Friendly Yards. These yards support food production and pollinator habitats.

Ray LaRoche, a sixth-generation farmer and the Ag Commission's Vice President, was enthusiastic about the attendance he had during Durham's Farm Day. "The weather wasn't ideal, but we still had over 200 people turn out." At the LaRoche Farm, visitors enjoyed a sheep shearing demonstration, display of plowing and field tillage equipment, plus a talk on beekeeping.

One of Lee Alexander's hives is located on the LaRoche Farm. LaRoche said, "Just as soon as Lee started talking about beekeeping, visitors gathered around to hear what he had to say." The visitors enjoyed honey samples as Lee shared some basics about the hardworking honey bees that provided the delicacy. "We're hoping a family would be interested in adopting this hive and working with Lee to manage it through the year," LaRoche said.

Alexander concurred, "Ray loves having the bee hive on the farm. This individual could get involved for minimal investment. I'd be happy to help them." Later he clarified, "I don't think there's going to be a magical increase in the number of beekeepers in Durham. That's really not the purpose of the Bee City USA designation. It's more building the awareness of the importance of pollinators."

Ray LaRoche manages his diversified farm in a way that aligns nicely with the Bee City USA mission. His chief products are hay, beef, and maple syrup. He does his farming after hours and on weekends, when he is home from his full-time job at the Division of Public Works. LaRoche described his 126-acre farm as chemical free. The field land devoted to hay is fertilized with green cover crops like oats. Recently he reseeded a hay field with 50% red clover and 50% timothy grass. Next spring, he anticipates that other pollinators will get a boost from foraging in the red clover. White clover tends to appear in grazed pastures.

All these activities help meet the Ag Commission's responsibility to educate the public and raise awareness of pollinator needs. The resolution adopted by the Town Council and submitted to the Bee City USA organization addresses taking preliminary steps to make smart decisions regarding insecticide and herbicide



Farm scene with tractor and the ag commission logo

use. Since the Ag Commission's role is not regulatory, the members solely advocate for the judicious use of chemicals, emphasizing an integrated pest management approach. Whenever possible, they encourage homeowners to adopt practices that have the "least ill effect on pollinators."

"We work with our Public Works Department to develop a control plan that is strategic and thoughtful. Our goal is to have a holistic approach to these management concerns," said Todd Selig, Durham Town Administrator. Two examples the town of Durham has adopted includes 1) a revised mowing schedule to protect monarch habitats and 2) discontinuing the use of herbicides containing glyphosate. "The biggest challenge we face right now is controlling invasives in some spots in the town forests. These invasives have proven hard to get ahead of and proliferate when controlled by simply hand pulling."

"Durham," Selig added, "has splendid natural resources and breathtaking open space. We all work tirelessly to protect these."



Tree City and Bee City USA



Durham's Ag Logo



Communication is key in their decision making. The Durham Friday Updates, a digital newsletter with an online archive, is shared electronically with residents to keep everyone informed on news and happenings. Selig said, "I drive this effort. Outdated newsletters serve no one. When new initiatives come up, we talk about it early and encourage everyone to get involved. We have better public policy, when we've heard from people."

Selig credits this process to helping usher the Bee City USA designation through to completion. Just as soon as Lee Alexander and the Ag Commission brought it forward to the Town Administrator and Town Council, residents read about it in the Friday Updates. They had a chance to express their opinions, ask questions, and learn about how they might get involved. When the resolution was put to a vote, people had confidence that it made sense and was policy they could support. "To keep residents informed of our activities, the Ag Commission submits regular posts to the Friday Updates website," Alexander said.

The Bee City USA resolution the town adopted points out that the designation leads to many positive outcomes for communities including increased yields of fruit and vegetable crops, building community among like-minded partners, and increasing demand at local garden centers for plants that attract pollinators.

Beth Simpson, owner of Rolling Green Nursery in nearby Greenland, NH confirmed that demand for pollinator friendly plants is growing. "School pollinator gardens are some of our biggest and most frequent customers," she said. "We carry a wide number of plants that are ideal in these settings." Joe Pye Weed, Cardinal Flower, and Buttonbush are three top favorites for pollinator gardens her customers purchase.

At the nursery she runs with her husband Rick Simpson, they maintain extensive display gardens, so homeowners can see what the plant will look like when it settles into a garden bed. "People ask us for plants that have not been exposed to neonicotinoids. We know our suppliers and we know they are going with biologicals to avoid the ill effects from neonics," Beth said.

To assist home gardeners with pollinator plantings, Rolling Green Nursery offers links to a wide range

of resources on their website. Among the resources are links to the Xerces Society, and the North American Pollinator Partnership (P2). The comprehensive P2 website is also where green thumb enthusiasts will discover a link to the Bee Smart Pollinator Gardener app. This free download helps gardeners create customizable plants lists from the app's library of over 1,000 native plants. The plant recommendations are specific to the searcher's area based on zip code.

Lee Alexander and his wife Elaine are avid gardeners themselves. Their

yard is populated with zinnias, Monarda (bee balm), and wildflowers throughout the lawn. "I take pride in my lawn," Lee said. "It looks quite different from a chem lawn." Their pollinator friendly yard on the banks of the Oyster River is hospitable to his bees. "This has been a strong year for honey," he reported. He manages hives populated by Carniolans and Russian bees.

Alexander forecasted the Ag Commission is likely to feature a honey extraction demonstration at a future Farm Day Event. "We had hoped to

### Five Things You Can Do To "Bee-Friendly" to Pollinators



#### 1. Re-think your lawn

- Wildflowers are beneficial to bees and should not be considered "weeds"
- Dandelions and clovers are key sources of pollen and nectar
- Avoid so-called "weed and feed" fertilizer products
- Mow your lawn late afternoon/early evening when bees are less active
- Encourage fall wildflowers (e.g., goldenrod, purple aster, milkweed) to grow in some areas that are purposely mowed just once a year

#### 2. In your garden, plant flowers/herbs that attract bees

- Annuals: purple coneflower, alyssum, forget-me-not
- Perennials: Ohio spiderwort, lavender hyssop, black-eyed susan, wild bergamot, asters
- Herbs: basil, chives, oregano, rosemary, bee balm

#### 3. Plant fruiting trees & shrubs

- Pollinators are critical to fruit production
- Includes all varieties of apple, cherry, pear, peach, and blueberry



#### 4. Favor the growth of native trees/shrubs

- Early Spring - Pussy willow, quaking/big-tooth aspen
- Spring - Cranberry bush, arrow wood, winterberry holly
- Summer - Sweet pepperbush, Virginia rose, red-osier dogwood
- Late Summer - Panicle hydrangea, butterfly bush

#### 5. Bee-aware, there are many types of bees

- Honey bees originally came from Europe.
- In New Hampshire, there are over 100 species of native bumble bees.
- Most bees are not aggressive, while wasps, hornets and yellow-jackets can be



**For More Information:**  
**Rethinking your lawn:**  
<http://thehoneybeeconservancy.org/plant-a-bee-garden/> <http://www.pollinator.org/PDFs/EasternBroadleaf.Oceanic.r18.pdf>  
**Creating Bee-friendly gardens:**  
<http://www.davidsuzuki.org/what-you-can-do/food-and-our-planet/create-a-bee-friendly-garden/>  
**Becoming pesticide free:**  
<http://www.beeaction.org/pollinator-friendly-habitat.html>  
**Attracting bees and other pollinators:**  
[https://extension.umh.edu/resources/files/Resource005973\\_Rep8387.pdf](https://extension.umh.edu/resources/files/Resource005973_Rep8387.pdf)  
**Organizations actively involved in pollinator conservation:**  
**Friends of the Earth:**  
[www.beeaction.org](http://www.beeaction.org)  
**Sierra Club:** [www.SierraClub.org](http://www.SierraClub.org)







*Two hives with the bees on front porch of both hives*

include it in this year's Farm Day Event, but the weather didn't cooperate." One issue the Ag Commissioners expect to take up soon is a redesign of their logo. Currently the logo, features an apple, a chicken, and a barn. "But that apple was pollinated by a honey bee," Alexander said, "So a honey bee needs to be added."

Raising awareness of pollinator protection is the main aim of the Bee City program. If more beekeepers convinced their towns and cities to apply, it would help provide increased forage for all pollinators. To learn more about the program, visit: [www.beecityusa.org](http://www.beecityusa.org)

**Melissa Moore** has been a beekeeper for four years. She is a member of her local bee club. As a freelance writer, she has submitted articles to agricultural and horticultural publications that circulate in the Northeast. Her hands-on experience from her involvement with her family's diversified 210 acre farm. Through her writing, Melissa likes to share great stories relating to the environment and excellent land stewardship.



What should I use to  
replace Fumagilin-B?

Only  
**SuperDFM HoneyBee**

**N**icrobials  
strongmicrobials.com

**Z SPECIALTY FOOD, LLC**  
Moon Shine Trading Co. & Island of the Moon

**WE BUY, SELL  
AND PACK:**

- Natural & Varietal
- U.S. Honey
- Round Comb Honey
- Fresh Bee Pollen
- Retail • Wholesale • Bulk
- Custom Packing

**Contact us:**  
tasty@zspecialtyfood.com  
www.zspecialtyfood.com  
800-678-1226

**Visit us and send samples  
to our home:**  
1250-A Harter Ave.  
Woodland, CA 95776

Z Specialty is a small, family run packer of honey and other tasty treats.  
We'd love to meet & speak with you!

*Buying and Selling Honey from America's Beekeepers since 1979!*

**E. SUHRE BEES**

**Package Bees available April and May**

**Queens available April through October**

**For information, pricing or ordering  
call Eric (530) 228-3197**