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Editor: Sarah Chappelow



# ***Green Thumb Gazette***

## ***Scenes from the Garden: July***

Vegetables and flowers are in full bloom at the garden!



*Kale is high in Vitamin K.*



*Sunflower stands tall and bright.*



*Pretty Cleome brightens the plots.*



*Green cabbage ready to be picked.*

## ***Summary of IPM Garden Talk– by Ann LaCroix***

Due to the rain cancellation on Monday, July 18, many gardeners were unable to attend the IPM talk up at the garden on Wed, July 20. Therefore, here is a summary of the IPM focus points:

**Integrated Pest Management or IPM** uses a combination of non-chemical strategies to reduce pests and fungus to less damaging levels. Please use these websites for further information:

<http://extension.unh.edu/Agriculture/Integrated-Pest-Management-IPM>

<http://extension.unh.edu/Gardens-Landscapes/Education-Center-Information-Line>

There are various guesstimates from biologists and ecologists that between 1.5 million and 50 million insect species live here on Earth, yet only 5% of them are labeled as “pests”. If one decides to use an organic insecticide spray or powder to help eradicate a pest in the garden or lawn, remember that **all** organic and chemical insecticides are toxic to beneficial insects and therefore should only be used when a combination of techniques are not keeping populations in control. For this reason, it’s important to educate gardeners on these general non-chemical control methods:

### **General garden practices:**

- Keep plants healthy by providing adequate and even moisture, sufficient nutrients and maintaining a proper soil pH.
- Avoid planting too close since this reduces air circulation and increases the likelihood of disease.
- Remove and destroy badly infested or infected plants.
- Keep area around the garden free of weeds and rubbish.
- Rotate crops from year to year to reduce the buildup of host insects and fungal spores overwintering in the soil.
- Try to use resistant and quick maturing seed varieties whenever possible.
- Check plants regularly for pests. Learn to recognize different insects and to distinguish between the harmful, beneficial, and harmless.

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Continued on page 3...

## *Summary of IPM Garden Talk, cont.*

**To reduce diseases in general:** Encourage plant vigor, by adding a liquid or granular organic fertilizer in mid-July. Avoid over-watering and over fertilizing. Do not water at night when foliage will be slow to dry. Purchase disease resistant seed when possible. Do not compost infected plants.

At the beginning of the talk participants viewed many photos of common beneficial insects that eat pests before they become a problem. Some beneficial insect species here in the Northeast are:

- ladybugs or ladybird larvae and beetle= eat aphids, mealybugs, trip, any small eggs of insects
- ground beetles=a big beetle that can capture larger insects; hides in mulch during day
- assassin bug= a big black bug that can capture larger insects such as squash bugs or stink bugs
- lacewing=eats any soft bodied insects and eggs
- praying mantids =eats any moving insect
- big-eyed bug=eats any small stage nymphs (a smaller version of adult) & adults
- spiders=captures any moving insect
- hover (syrphid) fly= eats many larvae (caterpillars)
- pirate bug= eats cucumber beetles and eggs

**Ways to attract beneficial insects:** Grow flowers such as calendula or marigolds in amongst your vegetables that attract pollinating bees and beneficial insects. Sunflowers, grown on the North side of the garden become “insect hotels” for landing, mating, and breeding sites. Sinking an upside down garbage can or shallow bowl at ground level will act as a small water hole which will attract toads and frogs who love to eat slugs and all insects. Adding mulch for weed control, moisture, and soil cooling will also provide hiding places for ground beetles and toads. Garden diversity is the key to creating a mini ecosystem of flowers, vegetables, and mulch for beneficial insects to thrive. Many gardeners have implemented a diversified garden this year and should see less insect damage in their plots.

### **Using Non-chemical methods to handle pest outbreaks:**

1. To remove eggs hidden **under** leaves of squash, pumpkin, melon, and zucchini, wrap duct tape, sticky side up, around your palm and just tap the eggs and hatching nymphs lightly to remove them from the plant. Try to monitor your plants either daily or every other day in the morning as populations can hatch very quickly, wiping out your crop before you know it. Insects are cold blooded animals and are slow moving in the cooler early morning hours, therefore easier to capture. The group captured cucumber beetles and both eggs and nymphs of squash bugs.
2. Create an easy bug catcher: Cut the top off of a milk jug, filling it with a couple inches of water and a few squirts of any liquid dish soap. Shake Japanese beetles, stink bugs, cucumber beetles, and potato beetles into the jug.
3. It is said that if you dampen cabbage leaves and sprinkle them with cornmeal, the caterpillars will eat the meal, swell, and die. Don't be fooled by that lovely white flitting butterfly flying around the gardens. Those are female cabbage butterflies looking to lay hundreds of eggs on your cabbage!

## Summary of IPM Garden Talk, cont.

4. For slug control, sprinkle sharp oyster shells around leafy plants to discourage their movement. Use wood boards as a trap and collect earwigs, pill or sow bugs and slugs during the heat of the day.
5. Interplant African marigolds (**Tagetes erecta**) as lures for Japanese beetles. The African marigold is more effective than the French flat-petal marigold.
6. Encourage birds such as robins, wrens, and sparrows to nest near gardens as they are great caterpillar eaters.
7. Use 3" vertical collars around young plants in the Spring, setting the collars 1 inch out around plants such as tomatoes or peppers for cutworm control.
8. Delay starting cucumbers, potatoes, corn until mid- June to delay the flower and fruit formation from emerging cucumber beetles, potato bugs, and corn borers.
9. Cover any plants with suspended row cover or agri-fabric which acts as an insect, rodent, and deer control in the garden.
10. For squash borers, look of a small round hole at the base of any squash or melon plant to see if orange dust or "frass" is present. Cut out larvae with a lengthwise slash and cover slash with soil to encourage multiple rooting. Butternut species are resistant to borers. Remove egg clusters with duct tape. Use row cover over plants until egg laying period ends, usually around the first week of August. Crop rotate next year.
11. Tomato hornworms have hatched on the **undersides** of tomato leaves now. Often mistaken for a hummingbird, the sphinx moth is the adult. Check your butterfly bushes in flower now and you may catch one hovering at a flower sucking nectar. Remove caterpillars with duct tape. Crop rotate next year as pupae overwinter below tomato plants.
12. Use yellow sticky traps or soapy water on leaves for control of aphids.

Some of the many beneficial insects in your garden:

Ladybug larvae



Bigeyed bug adult and nymph



green lacewing



Common ground beetle



hoverfly (syrphid fly) and 1/2 inch larvae



Assassin Bug



## Calling All Gardeners to Join the NH Gleans Program!

Merrimack County Conservation District (MCCD) would like to invite you to partner with us during this harvest season! This is our third year participating in NH Gleans; a network of organizations working to increase the availability of fresh and local produce for those in need.

Throughout the past few years, many of you have generously donated to our gleaning program, helping to feed those in need in Merrimack County. Last year alone, we were able to donate over 13,000 pounds of fresh, local food to various community organizations, including:

- Food Pantries
- Soup Kitchens
- Homeless Shelters
- Schools
- Senior Centers

These accomplishments would have not been made possible without the generosity and support of our local producers. *Why compost or till under good produce? However imperfect it may be, it still has the same nutritional value and rather than see these products go to waste, wouldn't you like to see your hard work benefit people in need in your community?*

How does it work?

Gleaning coordinators connect with NH farms and private gardens to make arrangements to harvest surplus crops or pick up produce from farms and farmers' markets. Produce is then distributed to participating clients.



**\*\*Donations to our gleaning program are TAX DEDUCTIBLE!\*\***

New Developments for 2016:

- This year, MCCD is partnering with Elder Services, a program through BM Community Action Program, where we will be bringing gleaned produce to the 5 senior centers throughout Merrimack County.
- There are 12 summer meal sites in Merrimack County. These sites provide meals to youth, many of which struggle to access healthy foods during the summer when school is out. MCCD is looking to reach these locations with our gleaning program.

Please join us in our efforts; Merrimack County Conservation District needs your help to make the 2016 season a success!

To schedule a glean at your farm/garden or to learn more about the program, you can visit [www.nhgleans.org](http://www.nhgleans.org) or email us at [localfood@merrimackccd.org](mailto:localfood@merrimackccd.org).

## Upcoming Workshops

### SUCCESSFULLY GROWING HEIRLOOM TOMATOES

**Monday, August 1, 6:30 PM**

**Boscawen Municipal Complex, 116 North Main Street, 4<sup>th</sup> Floor Boscawen, NH**

Join UNHCE Master Gardener, Ken Cook, and learn how to successfully grown heirloom tomatoes and learn about his “Cross-Hemisphere Dwarf Tomato Project” and how they are developing tomato varieties with heirloom tastes. Please call Mary West at 796-2151 or email: [mary.west@unh.edu](mailto:mary.west@unh.edu) to register.

Go to this link for directions and a flyer: [http://extension.unh.edu/events/index.cfm?e=app.event&event\\_id=41344](http://extension.unh.edu/events/index.cfm?e=app.event&event_id=41344)

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### GOT HEALTHY SOILS?

**Monday, September 12, 2016 6:30 PM**

**Boscawen Municipal Complex, 116 North Main Street, 4<sup>th</sup> Floor Boscawen, NH**

Stacy Luke, Merrimack County Conservation District manager, will discuss the Soil Health Initiative, different ways to improve your soil health, different soil tests, and different equipment available to improve your soils for a better harvest. Come try the penetrometer to test soil compaction. Three **Building Soils** books will be raffled off at the event.

Come learn the facts and get your questions answered by Stacy at the Boscawen Municipal Complex (4<sup>th</sup> floor) on September 12<sup>th</sup>.

Register by contacting Candace Haithwaite at (603) 753-9188 ext. 301.

Co-sponsored by UNH Cooperative Extension, The Merrimack County Conservation District, and the Boscawen Agricultural Commission.

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### SUPPORTING POLLINATORS IN THE LANDSCAPE

**Thursday, September 22, 2016, 6:30 PM**

**Wilmot Community Assoc.'s Red Barn, 64 Village Road, Wilmot**

UNHCE Food & Agriculture Field Specialist, Amy Papineau, will discuss the many types of bees that you may find in your landscape, the role of these insects in the environment, and how you can design your garden and landscape to provide pollinators with the resources they need. This workshop is free and open to the public.

Go to this link for a flyer and directions: [http://extension.unh.edu/events/index.cfm?e=app.event&event\\_id=41343](http://extension.unh.edu/events/index.cfm?e=app.event&event_id=41343)

Please register by September 19 by contacting Kristy Heath at [603 – 526-6555](tel:603-526-6555) or [kheath@ausbonsargent.org](mailto:kheath@ausbonsargent.org)

## ***UNH Cooperative Extension Newsletter “NH Outside”***

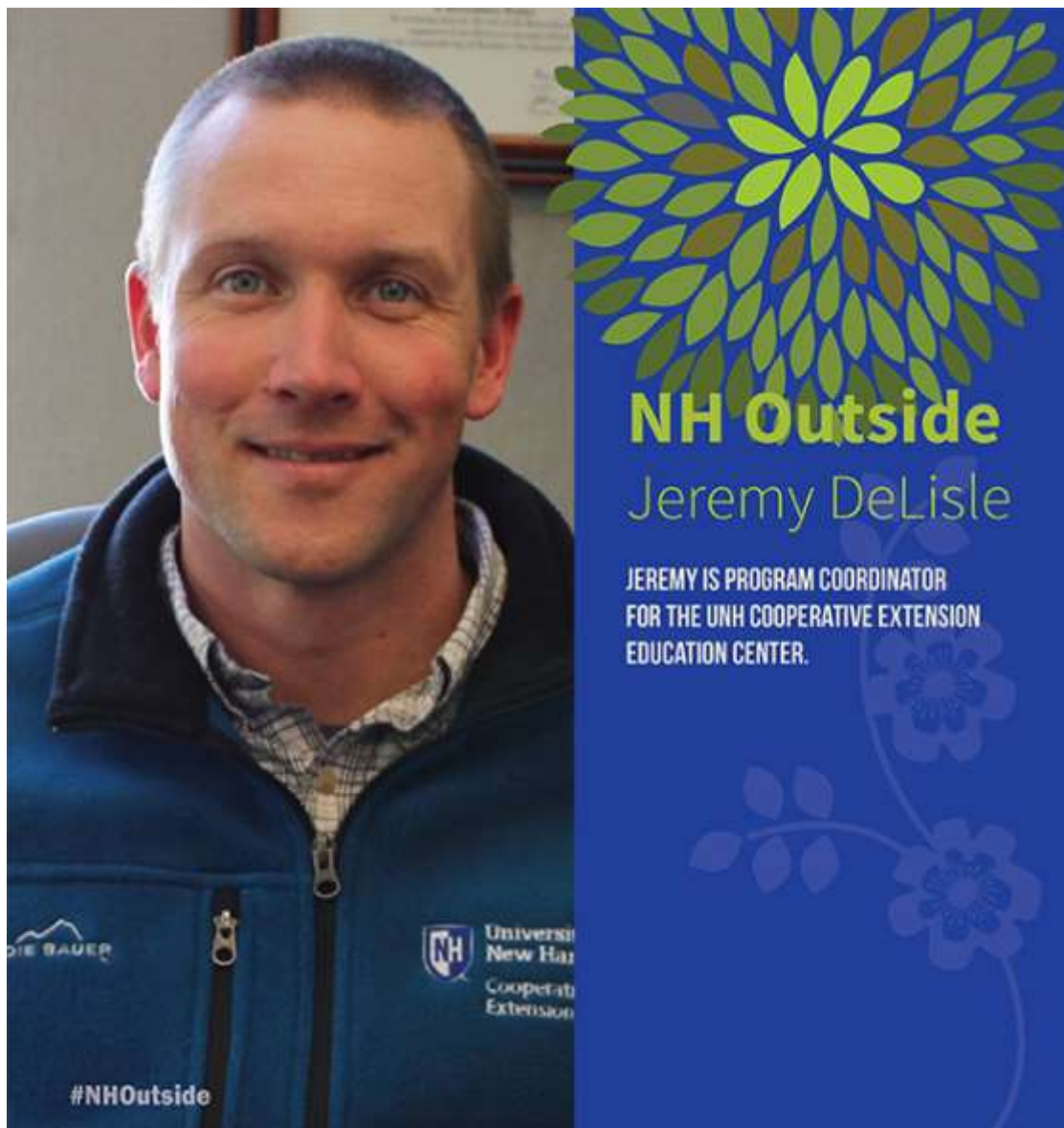
UNH Cooperative Extension Ed Center publishes a newsletter called NH Outside.

NH Outside is designed as a source of information for gardeners and plant-lovers of all kinds. Our information is oriented for New Hampshire gardeners and conditions.

Each issue includes a monthly checklist for suggested garden tips along with articles on gardening topics suitable for NH.

To sign up for this newsletter, you must visit this site and register to be on the newsletter email list.

<http://extension.unh.edu/newsletter/NH-Outside-Jeremy-DeLisle-July-2015>



Source: UNH Cooperative Extension