



# Piscataquis Gardening

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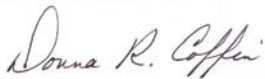
University of Maine Cooperative Extension (UMCE) is the major educational outreach program of the University of Maine, with offices statewide. UMCE provides Maine people with research-based educational programs to help them live fuller, more productive lives

**Goal:**

The goal of the Piscataquis Gardening Newsletter is to provide timely information on practical, sustainable, research-based horticultural practices, tools and techniques which will improve home gardening success. Topics on growing and caring for vegetables, fruits, flowers, and landscaping for the home will be included as well as pest management techniques. Information will be based on our U.S.D.A. plant hardiness zone. Upcoming events and programs of interest will also be included.

If you have a question, feel free to contact me and I can include it in our garden question section.

Sincerely,



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**Lily Leaf  
Beetle  
Biological  
Control  
Update**

The lily leaf beetle, *Lilioceris lili* (Coleoptera:

Chrysomelidae), a pest of ornamental and native lilies, has become established in Piscataquis County a few years ago. It has been in North America since 1945. The lily leaf beetle overwinters as an adult and feeds on *Lilium* and *Fritillaria* species in the spring before mating and laying eggs on the underside of leaves. A thick fecal shield covers larvae, which feed on leaves and flowers, often defoliating plants before pupating in the soil. Young adults emerge in mid-summer and feed before overwintering in leaf litter. Many home gardeners have considered replanting their lilies to another type of perennial to get away from the pesticide sprays needed to control this pest. Now there is hope on the horizon for an effective biological control.

*Lilioceris lili* occurs throughout Europe where it rarely attains pest status. The University of Rhode Island Biological Control Laboratory, in collaboration with CABI-Bioscience and colleagues in France, identified a complex of four larval parasitoids, which causes a high level of parasitism throughout Europe. On the basis of parasitoid surveys in Europe and laboratory experiments conducted in the USA and Europe, we determined that *T. setifer*, *L. errabundus*, and *D. jucunda* were safe and likely candidates to control *L. lili*.

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Also available online at <http://www.umext.maine.edu/piscataquis/gardening/newsletter.htm>



*Tetrastichus setifer* is likely the best candidate for controlling the LLB in the Northeast. It is widespread throughout

Europe and it has been relatively easy to establish in RI, MA, NH, and ME. Lily leaf beetle populations have declined substantially at the two oldest release sites. They last released *T. setifer* in Wellesley, MA in 2001 where it has heavily parasitized LLB larvae ever since (100% parasitism at peak larval density in 2005). They found similar results in Cumberland, RI where we last released *T. setifer* in 2002, with 100% parasitism at peak larval density in 2005. From the parasitoids released in surrounding states, they found *T. setifer* established in Bridgton, ME in 2004. *Tetrastichus setifer* has also spread several miles from release sites.

*Lemophagus errabundus* was found in a lily garden 3/4 mile from their Plainville, MA release site in 2005, indicating that it is not only established from releases in 2003 and 2004, but it has spread a considerable distance. They also released this species in our Kingston, RI plot where they found good parasitism in the weeks following release. *Diaparsis jucunda* has proven to be more difficult to establish against the LLB. It is found at higher elevations in Europe, and appears well-suited for northern New England, but they have not yet recovered overwintered parasitoids at any of their 2004 and 2005 release sites in RI, MA, NH, or ME. In 2005 they also released LLB larvae parasitized by *D. jucunda* into their lily plots to determine if this is a better way to establish this species.

Until the parasitoids move into the area here are some suggestions for control of the lily leaf beetle. If you only have a few plants in your garden, hand-picking adults and eggs can be effective (we prefer not to handle larvae, although there is no danger in doing so). The insecticides carbaryl (Sevin) and malathion are effective on adults and larvae. However, carbaryl is highly toxic to bees and malathion is also toxic to many non-target insects. To date, our material of choice for treating flowers is neem, an insecticide based upon extracts from the neem tree. Neem can be

purchased at garden centers under the trade names Turplcx, Azatin EC, Margosan-0, Align and BioNeem. Neem kills larvae and repels adults. Neem is most effective on first instar larvae; it must be applied every five to seven days after egg hatch. The insecticide imidacloprid also provides effective control. It is available in several formulations from Bayer including foliar sprays, soil drenches, and fertilizer stakes.

When trade names are used for identification, no product endorsement is implied, nor is discrimination intended against similar materials.

Source: Casagrande, R. and L. Tewksbury, Department of Plant Sciences, University of Rhode Island, Northeastern PIM News, May 2006 [http://northeastipm.org/ipm\\_news\\_popover.cfm?id=905](http://northeastipm.org/ipm_news_popover.cfm?id=905)  
And URI Green Share Factsheets, University of Rhode Island Plant Science Department, 2002, <http://www.uri.edu/ce/factsheets/sheets/lilyleafbeetle.html>.

## An Acre as the Measure for Land Area

The unit of land area in the United States is the acre. An acre contains 43,560 square feet. Have you ever wondered why an acre is 43,560 square feet instead of a round number like 40,000 or 50,000 square feet? The story goes like this. When plowing with a yoke of oxen, it was standard practice to rest the animals (and the farmer) after plowing a furrow 1/8 mile (660 feet) long. An eighth of a mile therefore became known as a furrow-long or furlong; (a furlong is a nearly forgotten term for distance, except at horse racing tracks where it remains in common use).

The usual practice after plowing a furlong was to then turn the team around on a "land" and plow the other direction. Lands were laid out so the farmer would be able to finish a land every 10 rounds with a 10 inch plowshare (about 16.5 feet). One could imagine that perhaps farmers used a pole or rod that was 16.5 feet long when laying out lands because this measure of distance is still called a rod today.

Source: Dorn, T., *Acreage & Small Farm Insights* Newsletter from the University of Nebraska- Lincoln (UNL) Extension Acreage, April, 2006, <http://acreage.unl.edu/Newsletter/NLS/April2006.htm>

## Protecting Plants from Frost Damage

We will get several more frosts between now and the middle of June. In our perennial fruits the part of the plant that is at most danger from frost are the flower buds and the flowers.

Most spring flowering bulbs easily go through a frost with no damage, but strawberry, apple, plum, etc. flowers can be killed by late frosts. Also, candles from the early growth of evergreens can also be damaged.

What is a gardener to do? Planting fruit trees on the north side of a ridge helps slow the emergence of flower buds and limits frost injury. Evergreens will recover and will be bushier next year due to the damage. Keeping straw mulch in place to slow the emergence of strawberries can also delay flowering. This will also delay fruiting.

Strawberries and some tender vegetables can be protected by irrigating water at the rate of 1/10<sup>th</sup> inch per hour when night time temperatures reach 32<sup>o</sup> F. As the water freezes it releases heat (latent heat) and will protect the flowers and buds of strawberries. If you do try irrigation to protect blossoms remember to keep the sprinklers going until all the ice is melted.



### Problem of the Polka Dot Lawns

With the grass starting to grow, many of us are gasping in surprise at the

state of our lawns. What was green and uniform the previous fall is now covered in dry pink, grey or straw colored spots, some of them quite large. These are likely caused by snow mold, a fungus that thrives in cool wet turf.

Snow mold is caused by two different fungi, *Microdochium nivale* and *Typhula* sp. Both of these fungi grow very well at temperatures just around freezing and need high levels of moisture to thrive. Snow cover is not a requirement for growth for pink snow mold. This past year's winter was mild and wet for long periods of time, creating the perfect environment for snow mold in even the best cared for lawns.

The good news is that snow mold rarely causes permanent damage to home lawns. As days warm up and lawns dry out the fungus will go dormant and the grass will recover. To assist in this process, home owners should rake over the diseased patches to fluff up matted down grass and increase air circulation. A light fertilizer (1/2 - 2/3 lbs N/ 1000sq. ft) could be applied to help the lawn recover. Do not over apply N at this

time of year, however, as it will cause excessive shoot growth at the expense of root growth.

Reducing thatch and compaction by dethatching and aeration in either spring or fall can help to reduce conditions that favor snow mold and create a healthier, happier lawn all around. Next fall rake up leaves and any other debris on the lawn. Continue mowing until the grass goes dormant. Long turf can become matted down and create humid pockets where snow mold thrives. Also avoid putting N fertilizer on your lawn in late September and early October. Fertilizing this time of year causes a flush of new leaf growth that will be very susceptible to snow mold in winter months.

**Source:** *Grabowski, M., Yard & Garden Line News, Volume 8 Number 5, April 15, 2006, <http://www.extension.umn.edu/yardandgarden/YGLNews/YGLNews-Apr1506.html>*

### May Garden Activities:

- Time to start planting our plants that can stand a little bit of cold weather: broccoli, cabbage, cauliflower, celery, Swiss chard, leek, lettuce, onions, parsnip, peas, radishes, rutabagas, turnips.
- Tune up your lawn mower if you didn't do it in the fall. Remember a sharp blade cuts the grass better than a dull blade.
- Plant your summer flowering bulbs like canna, caladium, dahlia, gladiolus.
- Direct seed annuals that like cool weather: sweet peas, forget-me-nots, larkspur, calendulas, and bachelor buttons.
- You can take the mulch off strawberries, but be on the watch for early morning frost. Either recover or set up a garden sprinkler and plan to water at a rate of 1/10 inch per hour. Just enough to protect the blossoms.
- Harvest your asparagus spears and look for asparagus beetle damage.
- Check your Asiatic lilies for lily leaf beetle. The parasites mentioned in the earlier article have not moved to our area yet so you will need to either hand pick or spray an insecticide to protect your Asiatic lilies from this pest. Remember the daylilies are not affected by the lily leaf beetle.





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**564-3301 or 1-800-287-1491 (In Maine)**



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### Featured Extension Publications:

The following Gardening Extension Publications are available at the Extension office nearest you. Many publications are also available online for free download at <http://extensionpubs.umext.maine.edu/>. For sale publications can be ordered directly from our publications store at the same web site.

- **Growing Potatoes in the Home Garden**, Potatoes are a popular Maine home garden crop. This 4-page bulletin covers soil types & pH, seed, fertilization, planting, pest control, harvest and storage. Includes variety list. 2000. Free online version available: Item #2077, From UMaine Extension, **\$0.75**
- **Planting and Early Care of Fruit Trees**, This 4-page bulletin explains when to plant fruit trees in New England and how best to dig and fill the holes. Discusses care and pruning, weed control, and pest management. 1997. Free online versions available: Item #2411, From UMaine Extension, **\$1.00.**

June 16<sup>th</sup>, **Extension Office Open House**, 1 pm to 3 pm, come and meet our new Extension Educator **Barbara Baker**. Barbara will be working with the 4-H Youth Development program in both Piscataquis and Penobscot Counties. She will also be working state wide in our Youth in Governance program. For more information call 564-3301. Hope to see you there!

**Agricultural Fair Season** is coming up! You can go online at <http://maineagriculturalairs.com> and find out more information about your favorite fair.

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|---------------------|---------------------------|
| July 1 to 4         | - Houlton Fair            |
| July 28 to August 5 | - Northern Maine Fair     |
| July 28 to August 6 | - Bangor State Fair       |
| August 10 to 19     | - Skowhegan Fair          |
| August 24 to 27     | - Piscataquis Valley Fair |
| September 22 to 24  | - Common Ground Fair      |
| October 1 to 8      | - Fryeburg Fair           |

### Calendar:

May 15<sup>th</sup>, **Penquis Beekeepers Association Meeting**, 7 pm at one of Jeff Patterson's bee yards, call Jeff for location 924-3074.

June, 1,8,15,23,29, and July 9, **Ecological Landscaping Course... Gardening as if the Environment Matters**, 9 am to 2 pm, Hancock County Cooperative Extension Office, Ellsworth. Fee \$70. Make check payable to UMCE, and send to Hancock County Office, 63 Boggy Brook Road, Ellsworth, ME 04605 with your name, address, day time phone and email. For more information call 667-8212 or in Maine 1-800-287-1479.

