Earth Day is Friday, April 22 and I hope you to take the opportunity to think about our environment and what you might do to improve its health. Change begins with awareness. I saw a public service announcement on television that showed members of a family leaving the faucet running while brushing teeth, getting a drink, etc. with a banner saying that we waste more water brushing our teeth than some people in the world have to last them a week. I have stopped running the water unless it’s necessary. I hope you will too.

....Jolene

North Country Gardening

Crazy Snake Worms

By Jolene Wallace

Paul Hetzler, who brings you an article on Maples in Peril this month, mentions the Asian jumping worm. For those of you who have not yet heard about them, here is what we know about them right now.

The Asian Jumping Worm (Amynthas agrestis) is native to East Asia and has been found in the United States, including Northern New York. It is called the jumping worm or crazy snake worm because it thrashes when handled, slithers like a snake, and is 1.5 to 8 inches long. The clitellum (the narrow milky band around it’s body) is smooth and completely encircles it.

You may be thinking that worms are good for our soil so don’t see a problem with these guys. Although worms do aerate our soil, break down organic matter leaving nutritious casts in their wake and are a welcome guest to the gardener and farmer, in our forested areas they can cause serious harm and the jumping worm does so at a much higher rate of speed.

The forest floor depends on a balance of soil structure and pH. The leaf litter retains moisture, prevents erosion, protects plant roots, deters invasive non-native plants, and promotes seed germination; all vital conditions for a healthy forest. When earthworms become too numerous in the forest soil, the leaf litter is reduced by their consumption and their churning of the soil further makes the soil more fertile and can change the pH. Fertility in a forest floor is not a good thing. It has been likened to deliberately planting weeds in our gardens. Consider the domino effect resulting from these changes. Native wildflowers and other native plants can be reduced, which results in a reduction of pollinators and other insects, which results in a reduction of birds. You get the picture, and it’s not a pretty one. Add in the crazy snake worm and you can see there’s a need for us to do something.

Continued on page 3....
Ruts

The mild temperatures for much of this past winter kept our soil from freezing until very late and it softened up quite early. If a vehicle drove across your lawn while it was so soft, chances are good you’ve got some ruts to deal with now. Ruts compact the soil and the more clay in the soil, the more prone to compaction it will be. When repairing ruts you need to do more than just fill in the rut with new soil. Take a spading fork and try to loosen up the compacted soil at the bottom of the ruts. Push down or slice away the pushed up soil on the sides of the ruts then use as much new soil as necessary to level out the ground.

Since working in wet soil compacts it even more, try to wait until the soil has dried somewhat before doing this. Rake over the repaired area, roll it lightly or tamp it down lightly with your foot and scatter grass seed and starter fertilizer over the bare areas. Grass seed won’t sprout until the soil temperature reaches 50 degrees so you have a few weeks before you need to do this step.

Try to keep all traffic off your lawn until the soil dries out enough to bear the weight. This includes tractors, delivery trucks, bicycles, ATV’s and even your riding lawn mower when the ground is really soft.

When to Prune

From the plant’s perspective, the best time to prune is when it is metabolically active so it can quickly respond to the pruning cuts. This is generally from mid-March through mid-July. Exceptions are when the plant is in bloom and the week when it’s first pushing out its new growth for the season. Avoid doing much pruning during these times. The next consideration is whether to prune before the plant leafs out or after, and this depends on what you want to accomplish. If you prune spring blooming plants before they leaf out, you’ll be removing flower buds as well and diminishing this year’s show. The plant doesn’t mind but you might.

In general, prune before the plant leafs out if you want to stimulate new growth or make big changes to the plant’s growth habit. Pruning before the leaves emerge invigorates plants. This is also a nice time to prune shrubs because you can see the branches more easily without leaves in the way. Pruning after the leaves emerge maintains the size of the plant instead of invigorating it. This is a good time to prune shrubs and hedges that have gotten as tall as you’d like. This is also a good time to prune shrubs such as forsythia and spirea that produce lots and lots of branches from the ground. You can thin out the extra branches now without inducing a lot of new growth in response.

Leave those leaves!

I saw someone carefully raking all the leaves out from under their shrubs the other day. It looked like they were going to be bagged up and put by the curb. What a waste! Most of those leaves could have been left right there to serve a natural mulch. If they’re so deep they’re piled up against the trunks of your shrubs then you can reduce the depth to just a couple of inches but more typically people like to scrape all those leaves away down to the bare soil. Exposing the soil like this just creates a perfect environment for weeds to grow, and those rotting leaves would have benefited the plant roots and the soil.

Often people will rake away their natural, free mulch then put down a layer of expensive mulch they bought. Why go to all that work and expense? If you really like the tidy appearance or if you have a lot of spring bulbs between your shrubs that were being smothered by the leaves then at least save the leaves you rake up and compost them. Rotted leaves are already halfway composted and when finished...
they make an excellent amendment to any kind of soil. You can even spread the composted leaves in a thin layer over your lawn and rake them in. The key here is to not smother the grass blades, the compost needs to sift down between them.

Rake your lawn

Raking your lawn just as it’s turning green is an annual ritual for many homeowners. It’s only necessary to do where the grass has matted down over the winter into a dense layer that can impede emerging grass blades but there’s something extremely satisfying about the job. I like the feeling of ‘combing’ the grass and there are usually plenty of twigs and debris to clear out as well.

If this raking exposes patches of soil you’ll want to get grass seed down as soon as possible in a race with the weed seeds that are ever present. Grass seed doesn’t germinate well in soil temperatures below 50 degrees so you won’t see an immediate reaction but the weed seeds are already there and the race to fill in that space will soon begin. For these spring overseedings it’s usually best to use perennial ryegrass or a mix of fine fescues. Kentucky bluegrass makes a beautiful lawn but it takes 3 weeks to sprout once the soil is the right temperature so it’s not well suited to this spring race against weeds. A mix of all three grass types is another good approach; in that way all your options are covered.

Since these jumping worms reproduce and spread quickly we all need to do our part in preserving our forest floors. Being aware of the problem is the first step and I know our readers will now be on the lookout for these slithery fellows.

When purchasing plants, shrubs, and trees, look for worms in the soil around the roots before planting the plants into your ground. Remove and destroy any that you find. When distributing mulch or compost watch for worms. If you think you have located a jumping worm, (it’s large, slithers, and thrashes about) please put it into a closed container and bring it to the extension office. If you purchase or dig worms for fishing, leave them in the water when you are done for the day. Don’t bring them home with you to put in your garden.
The Veginator with Dillicious Dip

Recipe Created by: Gemma Cantwell, Tanner LaMarche, and Christopher Neureuther

Dillicious Dip:

Ingredients:
- 2c plain yogurt
- 1c chopped onion
- 2 cloves garlic, minced
- 2tbs apple juice
- 1 tbs oil
- Dried dill & chives (a pinch of each)

Directions:
- Simmer onions, garlic, oil, and apple juice about 10 mins/brown.
- Cool then mix rest of ingredients together, garnish with chives.

Veginator Wrap:

Ingredients:
- 1/2 c raw carrots
- 1/2 c kale
- 1c pepper
- 1/2 c corn
- 1/2 c broccoli
- 1/3 c onion
- 1/3 c raw pepper
- 1/2 shredded cheddar cheese
- 1/2 c mozzarella
- 3tbs oil

Sauce:
- 1 tbs basil
- 1tbs oregano
- 1c yogurt

Directions:
- Chop and simmer kale, pepper, corn, broccoli, onion, oil.
- Combine sauce ingredients.
- Put wrap in greased pan add 1tbs sauce, 1/2cooked veggies, 1/3c raw veggies, 1tbs of each cheese on half of wrap.

- Cook till crispy, fold in half.
- Serve warm with cool dip.

Should make 3-4 wraps.
Caterpillars and Foal Loss

There are two types of caterpillars that are often misidentified for the other. Eastern tent caterpillars cause damage to both trees and horses. Fall webworms will solely cause damage to trees. There are different ways to distinguish one from the other.

The eastern tent caterpillar hatches shortly after bud break and are gone by mid-June. They are dark with a distinct light stripe on the back. They feed only on apples, cherries and plums and form their nests in the crotches of the tree branches. They can quickly defoliate an entire tree, considerably weakening it. They often feed at night on nearby foliage and return to their webby nests during the day.

These caterpillars are not as big of an issue in the North Country as they are in the south, but they are still present. It is important to be on the lookout for the larvae on the fruit trees close to your pastures, especially if you have pregnant mares out grazing. Research has shown that consumption of large numbers of caterpillars by pregnant mares as they graze beneath infested trees increases the rate of foal loss in both early and late gestation.

An important distinction we must make is between the Eastern Tent Caterpillar and the Fall Webworm. The Fall Webworm is more common in the North Country and has the widest range of hosts of any caterpillar (more than 100 species of trees and shrubs). The larvae are hairy, vary in color, and have dark spots down their back. Their webby nests wrap around the end of branches instead of in the crotch of trees. Fall webworms don’t appear until August-September so the feeding they do causes no long term damage to the trees since it’s near the end of the season. Although unsightly, fall webworms are not a cause for concern in horses like the eastern tent caterpillar. If you do have questions or would like your caterpillars identified to find out for sure, please contact the Cornell Cooperative Extension Clinton County office at 518-561-7450.

Photos by Amy Ivy

Many thanks to our business sponsors:

Cook & Gardener
Duprey’s Feed & Supplies
Flowering Meadow Nursery
Garrant’s Vegetables
Giroux Poultry
Northern Orchards

North Country Gardening
Maples in Peril

By Paul Hetzler, St. Lawrence County Extension Educator

Remember that kid at school who was good at everything? Smart, athletic, popular, usually in a higher income bracket—seems like there was one in every class who must have taken more than their fair share when luck was handed out. And didn’t you find them annoying some days?

I imagine that’s how the rest of the forest community feels about sugar maple, Acer saccharum. Also known as hard maple, this icon of the Northeast has worn out more camera shutters than any other tree. Whether it’s their stunning fall foliage, the welcome summer shade they provide, or the stately sense of grandeur a line of them brings to back roads, the native sugar maple stands apart.

In terms of firewood, sugar maple is the gold standard in northern New York, and it is prized for the gorgeous furniture and flooring it can become. Then there’s its sweetness. Never mind that maple production is important to our regional economy, pass the syrup already, my pancakes are getting cold!

No one knows how far back the tradition of sugaring goes. But the Haudenosaune (Iroquois), who taught the settlers how to make syrup and sugar from maples, still hold the tree in high esteem, and observe the Maple Thanksgiving every year to express gratitude for yet one more gift from the Creator.

In back yards across the North Country every spring, barbeques and homemade wood stoves are fired up to boil down maple sap. Who cares if it takes an entire tank of propane to make a pint of syrup, the point is that you made it. Wouldn’t you feel a bit jealous of sugar maple if you were an ironwood or poplar? I have my suspicions. I think the rest of the forest should give maple some slack, though, given its health problems. Sadly, our maples are not doing as well as they seem.

In October 2015, the alarming results of a new study looking at forty years of maple growth rings were released by SUNY-ESF in Syracuse. I’ll let one of the study’s co-authors, Dr. Neil Pederson, an ecologist at Harvard Forest in Massachusetts and an expert on tree rings and climate change, speak for himself: “Outside of studies of red spruce in the 1970s, I have never seen anything quite like this. Most tree ring studies of canopy trees in the region do not show a decline like what we see in these sugar maple. Combined with evidence of reduced natural regeneration of sugar maple in the region, it is a concern.”

Combined with the more immediate effects of other stressors, this does not bode well for maples. Over the past 30 years we’ve had more frequent droughts, including the unprecedented (in terms of soil moisture) one in 2012, and lesser known issues like the European fruit lecanium scale.

As if that wasn’t bad enough, maples now face new threats from invasive species never before seen in North America such as the spotted lanternfly. Asian jumping worms sound like a joke, but they could singlehandedly put an untimely end to your sugar bush if they get established there.
Supplies
- Black paper
- Gallon jar
- Colored warm water (food coloring)
- Matches
- Tape
- Gallon size bag of ice

Directions:
1) Tape the black paper to the back of the jar so you are unable to see through it.
2) Fill the jar a little less than half full (about 1/3 full) with colored warm water.
3) Next, light a match and hold it over the opening of the jar.
4) After a few seconds drop the match into the jar and quickly cover the top of the jar with the gallon bag filled with ice.
5) Observe what happens and write down any observations you see.

How it works
The warm water heats the layer of the air that it comes into contact with. Part of the water will evaporate into the air and form water vapor. The warm air that contains water vapor rises, then cools, as it comes into contact with the air cooled by the ice. When the water molecules cool they slow down and stick together more easily. The particles of smoke acts as a nuclei for the “bunches” of water molecules to collect on. The process is known as condensation.

Relating this to weather
As the atmosphere (air) cools down, water vapor that is suspended in the atmosphere condenses into water droplets around condensation nuclei (tiny particles of dust, ash, pollutants, and even sea salt).

What is Fog?
Fog is a cloud that touches the ground or the surface of a body of water.

This activity came from Web Weather for Kids, to locate this activity and others like it go to: http://eo.ucar.edu/webweather/cloudact1.html
Spring and/or Summer Cover Crops

By Jim Cayea, Master Gardener Volunteer

Most successful gardeners I know use cover crops for various reasons. Cornell Cooperative Extension (CCE) promotes the use of cover crops for vegetables, fruit, and herbs. Cover crops benefit soil health. The benefits include: (1) Cutting fertilizer costs, (2) Suppressing weeds, (3) Increasing soil health and subsequent crop yield, (4) Preventing soil erosion, (5) Conserving soil moisture, and (6) Protecting overall water quality. These are great benefits for the home gardener.

I developed the chart on the next page, The Spring/Summer Cover Crops Attributes for Zone 4 from Johnny’s Selected Seed 2016 catalog, Pinetree Garden Seeds 2016 catalog, and Territorial Seed Company 2016 catalog. I used online sources Cornell Cooperative Extension, and Penn State’s Entomology Department, and USDA Plant Materials Program’s A Comprehensive Guide to Cover Crop Species Used in the Northeast United States. I learned that gardeners/farmers used other plant species as cover crops like crucifers, daikon radishes, Austrian Peas, et cetera. Depending on where you live may change what plant species are best for your garden.

You need to remember that it will take two to three weeks for the plant material to decay enough so you can plant your crop or garden. Failure to do this will result in poor seed germination or crop growth. Cornell recommends that gardeners incorporate their winter hardy cover crop early- (April or early May.) Be sure the plants have greened up and are six to eight inches tall.

If you are growing green manure, you will be planting the cover crop in April or early May. There are various recommendation on when to turn over the green manure. Do not let the cover plants grow more than one foot tall because incorporating the plant into the soil will be easier than if the cover plants were taller. These cover crops will increase the nitrogen in your soil.

If you want to add more organic matter, the March 2011 Volume 7, Issue 3 of the Cooperative Extension regional Vegetable Programs stated: “However, the cost of adding the extra organic matter just before planting is too high. It is better to get the nitrogen value and the soil improvement for the extensive root growth, and to work on organic matter production at the end of the growing season.”

This newsletter is also available on our website: http://blogs.cornell.edu/cceclintoncounty/ under Gardening: News

North Country Gardening
## Summer Cover Crops continued...

<table>
<thead>
<tr>
<th>Crops</th>
<th>Vigor of Germ. &amp; Establish.</th>
<th>Month(s) to sow</th>
<th>Applic. Rate Oz/100 Sq.Ft</th>
<th>Ease of Incorporation</th>
<th>Frost Sensitive</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alfalfa, Annual</td>
<td>***</td>
<td>Apr - Aug</td>
<td>1</td>
<td>**</td>
<td>Yes</td>
<td>Grows fast. Adds organic matter and nitrogen to the soil. Long taproots break up compacted soil and mines subsurface minerals. Excellent attracter for bees.</td>
</tr>
<tr>
<td>Barley</td>
<td>***</td>
<td>Apr - Sept</td>
<td>2</td>
<td>*</td>
<td>Yes</td>
<td>An excellent spring cover crop that produces large amount of organic matter (straw).</td>
</tr>
<tr>
<td>Buckwheat</td>
<td>***</td>
<td>Spring</td>
<td>3</td>
<td>**</td>
<td>Yes</td>
<td>Very fast growing and a phosphorus mining crop. Can turn over the crop in 6 weeks after planting. WARNING: NOT COLD TOLERANT.</td>
</tr>
<tr>
<td>Clover, Red Medium</td>
<td>**</td>
<td>Apr-Sept</td>
<td>1</td>
<td>**</td>
<td>No</td>
<td>Choose over this crop over hairy vetch. Prefers cool weather conditions, but well-adapted to wide range of soil types. Tolerates wet conditions better than hairy vetch. Fixes nitrogen up to 150 lb./acre.</td>
</tr>
<tr>
<td>Oats</td>
<td>***</td>
<td>Any Time</td>
<td>4</td>
<td>***</td>
<td>Yes</td>
<td>Requires good soil drainage, but tolerates low pH. Has a fast spring growth that adds organic matter to your garden.</td>
</tr>
<tr>
<td>Rye, Annual</td>
<td>***</td>
<td>Any Time</td>
<td>2</td>
<td>**</td>
<td>Yes</td>
<td>Cornell’s first choice. Overall an easy crop to establish. Adds organic matter to the soil.</td>
</tr>
<tr>
<td>Rye, Perennial</td>
<td>**</td>
<td>Any Time</td>
<td>1</td>
<td>*</td>
<td>No</td>
<td>Cornell’s second choice. Establishes faster than other perennials. Extensive root system makes it hard to turn over the soil. Adds organic matter to the soil.</td>
</tr>
<tr>
<td>Spelt</td>
<td>***</td>
<td>Spring</td>
<td>3</td>
<td>***</td>
<td>***</td>
<td>A wheat relative. Slower growth than rye crops. Spelt grows in soil too wet for spring oats. Grows better in low nitrogen soil, is more competitive with weeds in the spring, and heads a week later. Adds organic matter to the soil.</td>
</tr>
<tr>
<td>Vetch, Hairy</td>
<td>*</td>
<td>Any Time</td>
<td>2</td>
<td>**</td>
<td>*</td>
<td>NOT Recommended. See Cornell’s Cover Crop Fact Sheet Series Fact 7.</td>
</tr>
</tbody>
</table>

### Notes:
- This list is alphabetized and NOT IN ORDER OF PREFERENCE.
- 1 *** = Relatively High
- ** = Moderate
- * = Relatively Low

---

Have a garden or agriculture related business?  
This space is available for your business card!  
Contact us at 561-7450

---

Are you curious about all that’s going in our 4-H program?  
Check out the Clover Express at the link below! Call our office if you’d like to find out more about how you can get involved.  
[http://www.ccecc4hce.blogspot.com/](http://www.ccecc4hce.blogspot.com/)
I had the opportunity to be involved with North Country Jr. Iron Chef this year. As a fan of cooking competition shows, I had a vague idea of what to expect, however, I was pleasantly surprised by the level of skill that I saw among all of the youth involved in the competition.

The goal of the competition is to create a lunch or breakfast that can be recreated in a school cafeteria that would appeal to middle and high school youth. Taking that into consideration, the recipes needed to be low cost, easy to prepare, and include at least two local foods and two commodity foods. Teams could be made up of high or middle schoolers from Clinton, Essex, Franklin, Hamilton, Jefferson, Lewis, and St. Lawrence Counties.

Getting Started:
The only team from Clinton County consisted of three youth, Gemma Cantwell, Christopher Neureuther, and Tanner LaMarche all of which are members of local 4H clubs. Our Clinton County Team, “The Healthy Trio” began with a brainstorming session. The three youth involved all came with ideas and even recipes that they were interested in. What happened next gave me so much hope for our future; these three middle schoolers, all listened to one another’s ideas and relatively quickly agreed on a general idea to begin working on. Teamwork was really needed as they created, tasted, and reworked their dish until they had an awesome quesadilla and dip that met all of the competition requirements and limitations. The team practiced, as the recipe they submitted had to exactly reflect what they would do on the day of the competition. Even once the recipe was submitted, the team continued to practice, so each team member was confident in their role and the team as a whole had the timing down and were familiar with the rules and expectations of Jr. Iron Chef.

At The Competition:
The Healthy Trio set up and practiced their presentation to the judges (did I mentioned there is also public speaking involved?!) Once the competition began, all of the practice really began to pay off. They smoothly executed the recipe, even slowing down a few stages so their quesadilla would be hot at judging time. That said, as I coach, I felt a little nervous for the team, as around us, amazing smells began filling the gym. It was becoming clear that they were not the only well practiced, creative cooks in the competition.

Once the quesadillas were ready and plated, they were brought to the panel of judges and the Healthy Trio introduced themselves, explained their choice of dish and what they enjoyed about competing. If this wasn’t proof of a successful public presentation program by 4H, I don’t know what is. These 3 young people presented clearly and confidently in a gymnasium with over 20 judges, 29 other teams, and many spectators, the vast majority of which were unfamiliar faces.

Finally, the judging! Out of 21 North Country Jr. Iron Chef middle school teams, The Healthy Trio ranked third!!! It was a tough competition and these 3 did an amazing job. You should try their recipe... and look for them in the future at local restaurants and bakeries, wowing you again, I’m sure!

To any young people out there, it isn’t too early to start thinking about the 2017 North Country Jr. Iron Chef!!
Mark Your Calendars

We have scheduled several events for April — another busy month for our Extension Office. Please plan to join us for some or all of these events.

4/8 Greens: Join us to explore a variety of ways to prepare greens, such as kale, chard, and spinach. 12 to 1 @ CCE, $5 preregistration is required, either by calling the office or registering online at blogs.cornell.edu/clintoncountyeats

4/15 Adding Vegetables to your Diet: Join us to learn how to increase the amount of non-starchy vegetables in your diet. 12 to 1 @ CCE, $5 preregistration is required, either by calling the office or registering online at blogs.cornell.edu/clintoncountyeats

4/29 Kids in the Kitchen: Bring your family to try a few new recipes to get ready for the local food season. 11-1 @ CCE, No Cost, pre-registration is required, either by calling the office or registering online at blogs.cornell.edu/clintoncountyeats

Many of our local schools are commemorating Earth Day on Friday, April 22. If you have students in the schools, ask them about the programs and what they do to protect the earth. It’s never too early to begin a dialogue with children about our environment and our need to be mindful of the choices we make that affect it. Letting our children and grandchildren know that we value our environment goes a long way toward instilling similar values in our children.

Our office, located at 6064 State Route 22, Suite 5, is open from 9:00 am to 4:30 pm Monday through Friday. 561-7450.

The Master Gardener Volunteers of Clinton County are actively working in the community to bring programs to our residents. If you would like to schedule a program for your organization, church, or neighborhood, contact us for ideas. We tailor our programs to our audience. We also work with senior living centers and children to enable them to garden. Contact Jolene at 561-7450.
Better Living from the Ground Up

CURRENT RESIDENT OR:

From Our Family to Yours

This issue made possible thanks to donations from:
Our Business Sponsors
Readers Like You
and
The Chapel Hill Foundation
Thank You!!