There are a few great days coming in March. One is the Food from the Farm event on Saturday, March 7, a chance for you to sample delicious local food and meet our farmers and producers, one is Daylight Savings Time on March 8th, giving us more light and March 20 is the first day of spring. Food, light, and hope that winter is almost over! ....Jolene

Snow Jobs

Paul Hetzler, Cornell Cooperative Extension of St. Lawrence County

Where agriculture is concerned, dairy is king (or is dairy queen?) in northern NY State. But with the kind of winter we’ve had so far, I wonder if we shouldn’t start producing other crops, ones particularly suited to our region. How about we raise snow peas. Or iceberg lettuce, perhaps. OK, so I’m indulging one of life’s most futile activities, griping about the weather. But for farmers, foresters and gardeners, there is an up-side to all this snow.

Snow has been called “the poor person’s fertilizer” because it’s a source of trace elements and more importantly, of plant-available forms of nitrogen, a nutrient often in short supply. When snow releases a whole winter’s worth (what’s that—six, eight months around here?) of nutrients in a short time, the nitrogen value can add up.

Since air is 78% nitrogen, you’d think plants would have all they needed. But atmospheric nitrogen, N2, is a very stable, inert molecule that plants are unable to use. Where does usable nitrogen come from? Some soil bacteria can “fix” gaseous nitrogen, converting it to water-soluble forms that plants can slurp up. Lightning also turns nitrogen gas into plant “food.” But this only accounts for a small percentage of the nitrogen found in snow.

Turns out snow is a better fertilizer today than it was years ago. There’s an outfit called the National Atmospheric Deposition Program (NADP), which basically measures stuff that falls out of the sky that isn’t some form of water. According to the NADP, the vast majority of snow-borne nitrogen comes from pollution.

Coal-burning power plants and motor vehicles spew out various nitrous oxides, not great for us to breathe, but when washed into the

Continued on page 8...
Winter Reading

Any gardener with a few years of experience will agree that the key to a productive garden, no matter what you’re trying to grow, is the quality of the soil. One of the best, most comprehensive yet relatively easy to understand books I’ve seen on soil is Building Soils for Better Crops by Fred Magdoff (University of Vermont) and Harold van Es (Cornell). It’s in its third edition now and is available for around $22 at various on-line outlets or for free as a pdf that you can download from SARE’s website: http://www.sare.org/ Learning-Center/Books. This is a book you’ll turn to again and again so I encourage you to treat yourself to a hard copy. You can also buy it from the SARE website above. SARE stands for Sustainable Agriculture Research and Education. They have funded many farmer and Extension grants and produced many excellent books and resources. It’s geared towards growers and farmers but avid home gardeners will find plenty of useful information here as well.

Sweet Potatoes

I love sweet potatoes and this year I’m going to try growing some at home. I’ve worked with commercial growers who have had good success growing them around here, so I know it can be done. They are not related to regular ‘Irish’ potatoes so their culture is actually quite different. Where a potato is a modified stem with ‘eyes’ that form shoots, a sweet potato is actually a modified root. It is tropical and is not at all tolerant of frost. If you’re interested in growing some yourself, here are some tips from Chuck Bornt, a vegetable specialist from the Capital District who has conducted variety trials in recent years.

Sweet potatoes are started by planting ‘slips’ which are rooted cuttings that you can buy from some of the mail order seed catalogs. This crop is very cold sensitive and does best on raised beds with black plastic mulch to warm the soil. Get the black plastic laid down at least a week before planting in late May so it has time to absorb the sunlight and pre-warm the soil. The little ‘slips’ are deceiving, they look small and weak when you first get them. But once they are established in the prepared bed and get their roots anchored, they put on an impressive amount of top growth, producing long, lush vines that will carpet the ground. Deer, mice and Japanese beetles are their biggest pest problem. Keep them well watered through dry periods and harvest in September before the temperatures stay below 50 degrees. After harvest they need to be cured for about 10 days to sweeten up and develop their flavor. Try to find a location that will be around 80-90 degrees while the curing takes place.

Onion Plants

After years of starting my own onions from seed at home, I have finally thrown in the towel and decided to just order the bare root young plants this year. In past years I’ve done some of each to compare, and the mail order plants are quick and easy. To start your own from seed you need to get your grow lights set up by late February so you can start your seeds by the first week of March, or better yet, the last week of April.

For storage onions I’ve always like the variety ‘Copra’ but that’s getting hard to find. One catalog carries a variety called ‘Patterson’ that they say is even better than ‘Copra.’ For sweeter onions that don’t last as long in storage ‘Candy’ is an excellent variety for our region. The onion plants come in
Amy’s tips continued

bundles of 50-60 plants, each about 4 inches long and about half as thick as a pencil. They are sturdy and tolerate shipping and transplanting very well. The more bundles you buy, the more the price per bundle goes down, so try to find some friends to pool your order with.

Perennials from Seed

Potted perennial plants can really give you a head start on filling in your garden, if your pocketbook can handle the price tag. If you want to expand your garden without spending a fortune, consider growing some perennials from seed. Shasta daisy, columbine, Echinacea, rudbeckia, Dianthus, liatris, and even Delphinium are not that hard to grow from seed. It may take them a year to reach their full blooming potential but you’ll get many more plants from a seed packet.

Some perennials can’t be started from seed or take so long it just isn’t practical. You do need to buy a plant of the perennials in this group, but in many cases you can divide the plant in just a few years to multiply your collection. This group includes hosta, iris, garden phlox, daylilies, sedum ‘Autumn Joy’ and peonies, to name a few.

For the perennials you start from seed this spring, you might want to set up a nursery row in your vegetable garden where you can give the seedlings a year to put on good growth under your careful attention, and then you can move these sturdy seedlings to their final location in your perennial garden either in early September or the following May.

Rudbeckia ‘Indian Summer’ is easy to grow from seed.
Candy Heart Experiment

By Chelsea Baxter, 4-H & Nutrition Program Educator

Although Valentine’s Day is over and done with, you most likely still have some of the sugar remnants lurking around the house. Schools typically do a card and candy exchange that results in an abundance (if you’re lucky) of chocolates and those little conversation or “candy” hearts. Although, sugar candied hearts are popular amongst the youngsters they just do nothing for me. This month’s activity will allow you to make use of those little candies without the expense of your teeth.

What you’ll need:
- Empty bottles with the labels removed (water bottles are great)
- Various household liquids (I used vinegar, soda, water, rubbing alcohol and left one bottle with just air)
- Candy hearts
- Marker to label each bottle with the appropriate contents

Here’s the question: What will happen to the candy hearts if we put them in the different liquids?

Experiment:
1. Remove the labels from the bottles
2. Make sure the bottles are clean of any contents they may have held prior to this experiment
3. Label the bottles for each substance (soda in one, vinegar in the other and so on)
4. Add the substances to the bottles so they are filled about half way

- Make some predications! You may want to explain to the young scientists what each of the contents are. If they have never seen rubbing alcohol before you can tell them it’s similar to hand sanitizer because it is used to kill germs.
- Once you have finished recording their predictions you may add a few (about 7-8) candy hearts to each bottle.
- Observe the chemical reactions! Then record your results. Some of the candy hearts may take longer to dissolve or melt than others. Some may change the color of the liquid that it was added to.
- The hearts inside the bottle with just air can be a good reminder of what they looked like before.

Questions for further Investigation:
- What is that “stuff” floating around in the bottle?
- What happened to the color of the water?
- Which bottle made the hearts dissolve the fastest? The slowest?

To find this experiment & more like it go here:
http://fun-a-day.com/candy-heart-experiments-valentines-day/
To eat with the soup you make (see page 10)

**Ingredients:**

2 eggs  
1 cup all-purpose flour  
1 cup skim milk  
1/2 teaspoon salt

**Directions:**

1. Preheat oven to 450° F. Grease six muffin cups or 6-ounce custard cups.  
2. Crack eggs into large mixing bowl. Beat slightly to mix.  
3. Measure flour, milk, and salt into eggs. Beat just until smooth (don’t overbeat).  
4. Fill cups about half full.

   Bake 20 minutes. Decrease oven temperature to 350° F; bake 20 minutes longer. Immediately remove popovers from cups; serve hot.

**Yields about 6 servings**

**Source:** *Cooking Up Fun! Muffins & More* - Cornell University Cooperative Extension

**Nutrition Facts**

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* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.

| Calories | 2000 | 2,500 |
| Total Fat | Less than | 65g | 88g |
| Saturated Fat | Less than | 20g | 25g |
| Cholesterol | Less than | 300mg | 300mg |
| Sodium | Less than | 2,400mg | 2,400mg |
| Dietary Fiber | | g | 37g |
| Sugars | 25g | 30g |

16.7% calories from fat
Food from the Farm:
Eating Local in the North Country

Saturday March 7, 2015
2:00 to 5:00 pm
Plattsburgh City Gym
52 U.S. Oval

Meet the farmers and sample tasty dishes
prepared with local food by Chef David Allen of Latitude 44 Bistro

Admission price is all inclusive:
- Lots to sample, even more food this year
- Door prizes
- Meet your farmers
- Farm products for sale, CSA sign-ups
- Information on gardening and nutrition
- Family friendly fun, kid’s table
- Recipes for cooking with local products
- Mingle with local food enthusiasts
- Support our local food economy!

Admission: $5/adult, ages 5 & under free, $20 maximum per family

Tickets available in advance on-line, at our office, or at the door
http://cce.cornell.edu/clinton
For more information contact Cornell Cooperative Extension
561-7450 or email Amy Ivy at adi2@cornell.edu

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Winter Wisdom

By Jolene Wallace

Note: Call me a pessimist if you like, but I don’t feel that winter is over yet! I’m still reeling from being stuck in snowdrifts, taking the long way to work in order to access the roads more likely to be maneuverable without 4-wheel drive, and dealing with ‘whiteouts’ caused by blowing snow when I’m not able to stay home with a good book. I like winter and don’t mind the cold but I admit that this has been a rough one.

For staying informed I have found the following information useful and hope you do too.

Have you ever noticed how quiet it is when there is a blanket of fresh snow on the ground? Traffic noises seem farther away, and everyday sounds are a bit muffled. This occurs because a bed of fluffy snow has spaces between the snow crystals which act to absorb sound waves. When snow gets older and forms a crust, or the surface snow thaws and refreezes, sound bounces off the hard surface and may carry farther or sound louder than it would if there were no snow at all. Those of you who ice fish or live by the lake can attest to the fact that you can hear conversations being held by folks you can’t even see because their voices bounce off the ice and travel a considerable distance. Be forewarned! You never know who’s listening.

Someone we should all listen to is the National Weather Service when they issue weather advisories to give us a heads-up on what to expect from Mother Nature. Weather forecasting is not an exact science of course, but heeding the advice of the experts can help us be prepared when and if we are in for some rough weather. These are the terms used and what they indicate.

Winter Storm Watch—severe winter conditions such as heavy snow and/or ice may affect our area, but the location, timing, and occurrence are still uncertain. This alert is issued 12 to 36 hours in advance.

Continued on page 9.....
Snow Job continued....

soil, are nitrate fertilizers. Ammonia, another form of plant-available nitrogen, escapes from manure and commercial urea-based fertilizers.

So how much fertilizer is in the snowdrifts blanketing the North Country these days? Because we’re the “beneficiaries” of more pollution than most of the West and Midwest, we get more nitrogen in our snow than the national average, somewhere around 12 pounds per acre annually. Depending on the crop, a farmer may apply on the order of 150 lbs. of nitrogen per acre, so 12 lbs. is small potatoes. Literally. But it’s not chopped liver, either (which is high in nitrogen but not an ideal soil amendment).

Snow-based nitrogen can be a significant boon to ecosystems on marginal soils. In a year with abundant snowfall, sugar bushes, timber lands and pastures undoubtedly benefit from “poor person’s fertilizer.” Snow also brings a fair bit of sulfur, which is an essential plant nutrient. It also can make soil more acidic, which isn’t always a good thing, so let’s call sulfur a mixed blessing.

Obviously, snow provides soil moisture in early spring. What’s different about snowmelt as compared to rain is that snow melts gradually enough that nearly all its moisture gets into the soil. This gentle percolation is in contrast to summer rain, a percentage of which—sometimes a large portion—runs off and doesn’t benefit the soil.

When topsoil is saturated, or as agronomists put it, at field capacity, excess water seeps down through the soil profile. Eventually it becomes groundwater, raising the water table and recharging our aquifers. Nearly all water wells in the region tap into unconfined aquifers. This just means that the water that goes into the ground in a given location is the water that comes out of the well there. These aquifers depend on snowmelt as well as prolonged heavy rains of spring and fall for recharge.

Those who work in field and forest should take heart at the mounting snowbanks, not despair of them. Now if you’ll excuse me, I’m headed to the garden with the rototiller to plow up some snow. I’m pretty sure I have a packet of Mixed Frozen Vegetables seeds around here somewhere...

This newsletter is also available on our website:

North Country Gardening
A Storm Watch is upgraded to a **Storm Warning** when 4 or more inches of snow or sleet is expected in the next 12 hours, or 6 or more inches in 24 hours, or ¼ inch or more of ice is expected.

**Winter Weather Advisories** indicate that weather conditions are expected to cause significant inconveniences that may become hazardous.

A **Blizzard Warning** means snow and high winds will combine to produce near zero visibility, deep drifts, and life-threatening wind chill. It does not have to be snowing at the time; snow blowing in high winds making visibility less than one-quarter mile for at least three hours constitutes a blizzard.

We all know that wind makes low temperatures feel much colder than those without wind. I never knew how they were determined. If you don’t either, read on.

**Windschill** The National Weather Service Windchill Temperature (WCT) index uses advances in science, technology, and computer modeling to provide an accurate, understandable, and useful formula for calculating the dangers from winter winds and freezing temperatures.

- Calculates wind speed at an average height of 5 feet, the typical height of an adult human face, based on readings from the national standard height of 33 feet, typical height of an anemometer
- Is based on a human face model
- Incorporates heat transfer theory: heat loss from the body to its surroundings, during cold and breezy/windy days
- Lowers the calm wind threshold to 3 mph
- Uses a consistent standard for skin tissue resistance
- Assumes no impact from the sun, i.e., clear night sky.

Information taken from the National Weather Service website [http://www.nws.noaa.gov/om/winter](http://www.nws.noaa.gov/om/winter).

**And then there’s hypothermia**—

Hypothermia occurs when your body loses more heat than it can produce, resulting in a body temperature of 95° or less. It comes on slowly so you may not even notice that you need help. The symptoms include unusually slow breathing, shivering, cold and pale skin, tiredness, loss of coordination, and confusion. According to the Mayo Clinic, hypothermia is a medical emergency. Don’t take unnecessary chances. Keep your head covered when out in the cold and remember that mittens keep your hands warmer than gloves.

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

North Country Gardening
Soup’s On…

By Jordy Kivett, Nutrition Educator

Unless we are in for a rapid thaw, that ground hog was wrong. I guess he cannot win, seeing as how 6 weeks of winter is the longest option he’s given and considering it is glittering white and dangerously cold outside, I can’t even imagine spring right now.

Soup is the food I always write about in the late winter and I tried to avoid it directly this year, but the weather demands it. There is just nothing like steamy soup to warm you up. Having it simmering inside is a good way to add some moisture and heat to the air in your kitchen and it will be ready when you finally finish shoveling. Ahhh, soup!

There is always canned or dried noodle soup for convenience, but really soup is quite easy to make and so much healthier if you make it from scratch. You really do not need a recipe and you can use whatever you have lying around the kitchen. Here are a few simple steps for getting a homemade soup cooking in no time...

Start with your flavor enhancers. The first step would be to sauté any foods that will add a lot of flavor if you brown them a little. Onion is an obvious choice and goes well with nearly any flavor. Garlic, celery, even bell peppers or meat could be in the first phase. Browning food adds flavor. Ideally brown this stuff in the same pot you’ll cook the soup in, adding liquid will “degaze” the cooking surface and add a depth of flavor to the soup.

Add liquid. You may want to start with a splash of something like wine or cider to add flavor and deglaze the pot (lift up the browned bits). You could also add a little cornstarch or flour to thicken your soup, before you add the bulk of the broth. The main part of this step is the broth. You can purchase broth, but it is really quite simple and much healthier to make this yourself.

At Food From the Farm on March 7th, check out CCE’s vegetable broth making demonstration. If you are making a creamy soup, I would still add some broth and wait to add milk as a finishing touch, since it can separate or form a skin if it cooks for long.

Add in longer cooking foods. Beans, root vegetables, or anything that takes a while to cook through should go in early and can simmer for quite a while. Most dry beans (soak them overnight first and discard soaking liquid) can take a few hours and absorb a lot of liquid. However potatoes or turnips will only need about a half hour. Most food that will hold its shape if cooked for a long time can be added in for a long simmer. Though typically I would advise to not boil foods, since you lose some nutrients, in a soup you will be consuming the liquid the food was boiled in so the nutrients that survive the heat will actually be retained, so simmer away. Also add your spices so they can flavor the soup as it cooks.

Add in more delicate vegetables, like leafy greens, or quick cooking grains, like pasta just before you are ready to enjoy your soup. I like to have these prepped and ready to toss in at the last minute. You can toss in those things and then go to hang your wet outdoor gear up, grab your bowl and the soup will be ready to go.

Enjoy!
March is a busy time for some animals in the Adirondacks. Raccoons are starting to leave their dens where most of them have lost almost one-half of their Autumn weight. The prime reason for leaving the dens is the male raccoons’ desire to locate willing females to mate. All raccoons are searching for food in March. An individual raccoon will sleep through adverse weather in order to preserve its remaining fat reserves.

For varying hares and cottontail rabbits, March is a rough month since the snow surface becomes crusty which allows their predators to run on top of the snow and capture these two species more effectively. Male rabbits become more aggressive and physical fights break out between males. The females become willing to mate around St. Patrick’s Day.

Paired Black Ducks return this month to locate open water so they can feed. The pair will feed for several weeks in different areas of open water until the pair develops a preference for one location based on food and low predator-contact. Once the location is chosen, the female black duck will start building her nest and lay eggs for the middle to late April.

An Adirondack favorite, the chipmunk, periodically wakes up from its sleep during the winter. Chipmunks emerge from their dens to feed unless foul weather keeps them in their den. These ground squirrels stay close to their dens for safety, and will bring back several cheek loads of food particularly from bird feeders.

The first two weeks of March the barred owls’ mating urges increase. The males’ hooting increases and one hears the hooting throughout the day (Hoots are most common during late afternoon, early evening, and during pre-sunrise hours.). Barred owl females are poor nest builders so the females look at tree cavities; and abandoned crow, squirrel, or red-shouldered hawk nests. Barred owls mate and egg lay during the beginning of April.

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**Special Events**

Join us for food, fun, farmers, and frivolity on Saturday, March 7 from 2:00 to 5:00 pm for our annual Adirondack Harvest Food From the Farm event. See page 6 for details or call us at 561-7450 for more information.

**Spring Garden Day registration coming soon:**
Our Master Gardener Volunteers are preparing for Spring Garden Day, to be held on Saturday, April 18th at CVTech. In addition to an exciting variety of classes to choose from and a tasty lunch, our Special Guest will be Christian Oest from Cook and Gardener who will fill us in on some of the new and underutilized perennials, shrubs, and trees for our gardens. Contact Jolene at jmw442@cornell.edu or call our office for more information.

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
North Country Gardening

March 2015

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