

Dendrology Corner

Dendr = tree ology = study of

Prepared by: Matthew P. Edberg, HBMI Natural Resources Specialist

Sugar Maple (Acer saccharum) Acer = a maple tree saccharum=sugar

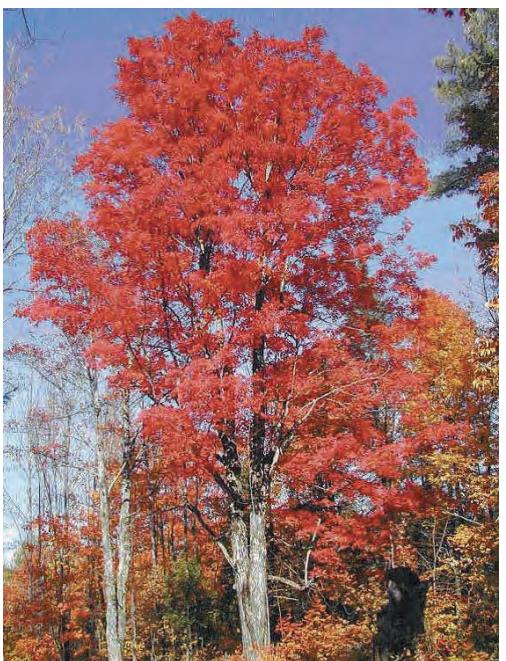
A very economically important tree species of the Acadian forest in Maine and is the main source of maple/sugar/syrup.

Native Range: Sugar maple is found growing in the Northeastern United States & Canada

Habitat: In New England Sugar maple is typically found growing on well drained ridges and rarely, if ever, in swamps. It is a major component of the Central & Northern hardwood forests in the US. It is commonly found growing in association with other species such as American beech (*Fagus grandifolia*), Yellow Birch (*Betula alleghaniensis*), Red Oak (*Quercus rubra*) and American basswood (*Tilia americana*) to name a few and forms various climax forest type communities with these and other tree species.

Natural History: Sugar maple is sometimes called rock maple due to its dense hard wood. It is classed as very shade tolerant and can attain a height of 90-120 feet and 2-3feet in DBH (diameter @ breast height= 4.5'). This maple is a long lived species easily reaching ages of 200-400 years. The leaf of the sugar maple is 'palmate' (broad like the palm of a hand) and is one of the dramatic color changes that leaf peepers enjoy in the fall. The fruit is a double samara also known familiarly as 'helicopters' or 'maple noses'.

Special Uses: The wood of the sugar maple is very hard and is used for pool cues, bowling alleys & pins, baseball bats, skateboard decks, and musical instruments (violins, guitars, drums) wood with a birds-eye or tiger stripe pattern is highly prized and valuable. The sugar maple as an icon can be found on the Vermont state quarter and the Canadian National flag.



Sugar maple in autumn, Adirondack Mountains, NY © Gary Lovett



Above: Full range of leaf colors



Left - double samara

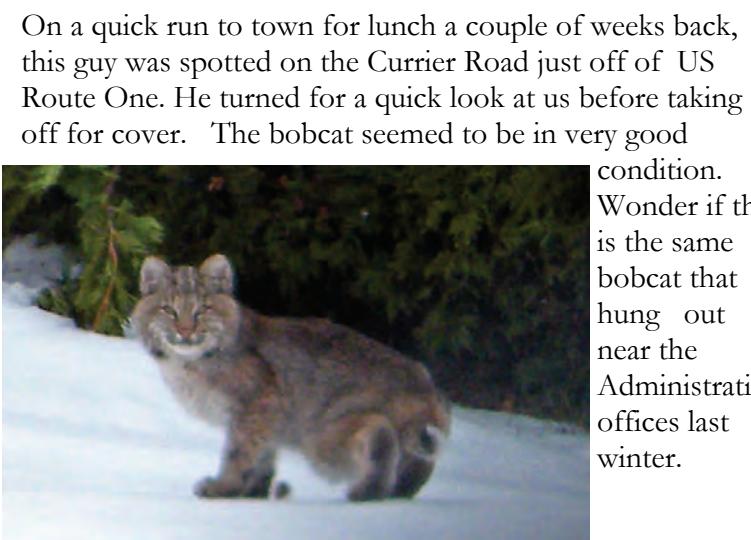
Medicinal Uses: Native peoples used the inner bark to make tea used to treat coughs, diarrhea, and as a blood purifier. Maple syrup is said to cleanse the kidneys and liver the sap is drunk as a spring tonic. *This is not an endorsement of use for medical purposes, use caution as many herbal remedies have not been medically tested and can be dangerous.*

Edibility: Most people are familiar with the sugar maple's most edible use as maple syrup. In the early spring maple trees are tapped and the sap is collected and evaporated into maple syrup. In 2012 1.24 million gallons of maple syrup were produced in New England, Maine produced 360,000 gallons. The average price per gallon ranged from \$35.00 to \$70.00 (Maple Syrup Statistics, "Maple Syrup" 2012-7, USDA). Other species of maples such as silver maple, red maple, Norway maple and even box elder can be tapped to produce sweet syrup. Besides maple syrup the seeds, inner bark and the young leaves are also edible.

Note: When collecting any wild plant species for medicinal or edible use be absolutely sure you have identified the species correctly! Remember to be respectful of nature and use a hunter-gather ethic, by leaving something for the future and for others.

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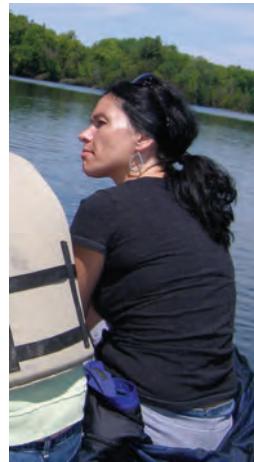
Another Bobcat Sighting



On a quick run to town for lunch a couple of weeks back, this guy was spotted on the Currier Road just off of US Route One. He turned for a quick look at us before taking off for cover. The bobcat seemed to be in very good condition. Wonder if this is the same bobcat that hung out near the Administration offices last winter.

New Face in Natural Resources

The Water Resources program is pleased to announce that Rhonda London, has joined us as our new Water Resources Technician. Rhonda has worked with our department in the past on a variety of projects and will be a great addition to the Natural Resources Department.



Sugar Maple (cont'd)

Utilitarian: In addition to the many uses for sugar maple lumber or, it is also an excellent fuel wood somewhat difficult to ignite but slow burning and with excellent coaling qualities and high btu values/cord.

Ecological Values: Sugar maple trees provide important wildlife habitat and a food source to a wide range of mammals birds, insects and fungi they also cycle nutrients in the forest such as nitrogen from their roots and calcium and magnesium in their leaves.

Literature Cited

[Silvics of North America Vol. II Hardwoods](#),
USDA, Handbook 654

Foster, 1990, [Medicinal Plants](#), Peterson Field Guides.

[Maple Syrup Statistics, "Maple Syrup" 2012-7, USDA](#)



Spring Maliseet Word Search

Q	M	W	A	Z	W	S	X	E	D	C	R
F	A	V	T	M	A	H	Q	A	N	G	T
O	L	O	N	A	H	Q	A	K	O	N	A
B	S	T	I	H	T	O	K	O	L	Y	P
H	O	N	U	T	J	M	U	I	S	K	A
O	N	L	P	Q	Q	A	W	T	I	W	K
E	A	L	O	Q	R	T	H	Y	Q	U	O
I	W	O	P	E	A	S	A	D	O	F	N
G	H	T	U	H	K	I	S	J	N	K	L
Z	X	C	V	S	I	Q	H	E	W	I	W

Find the Green Maliseet Words in the Puzzle above

Burrow - Aloq

Hare - Mahtoqehs

Hawk - Kuwhas

Ice Skate - Olonahqakon

Maple - Malsonaw

Mouse - Tuhkis

Owl - Tihtokol

Road - Awt

Sled - Tapakon

Sleet - Siqhewiw

Spring - Siqon

Syrup - Mahwan



Dragonfly Pond Watch Project

Dragonfly Pond Watch is a volunteer-based program of the Migratory Dragonfly Partnership (MDP) to investigate the annual movements of five major migratory dragonfly species in North America: Common Green Darner (*Anax junius*), Black Saddlebags (*Tramea lacerata*), Wandering Glider (*Pantala flavescens*), Spot-winged Glider (*Pantala hymenaea*), and Variegated Meadowhawk (*Sympetrum corruptum*). By visiting the same wetland or pond site on a regular basis, participants will be placed to note the arrival of migrant dragonflies moving south in the fall or north in the spring, as well as to record when the first resident adults of these species emerge in the spring. For a flyer on the project check out http://www.xerces.org/wp-content/uploads/2012/03/MDP_Citizen_Science_Projects_29Oct2012InteractiveWebsec.pdf

Why monitor ponds?

Collecting seasonal information at local ponds will increase our knowledge of the timing and location of dragonfly migration across North America, and expand our understanding of the relationship between migrant and resident populations within the same species.

Who can participate?

Anyone with regular access to a large pond or wetland who has an interest in dragonfly ecology and would like to contribute to our growing knowledge about dragonfly migration in North America.

How can I get involved?

Select a local pond or ponds of your choice to make observations for any of the five focal species: Common Green Darner, Black Saddlebags, Wandering Glider, Spot-winged Glider, and Variegated Meadowhawk. Make regular visits to your selected site; the frequency of site visits is your choice, but please try to make observations at least once per month. Record data on your location, dragonfly species presence/absence, and when possible, capture photo vouchers. There is no prescribed survey or monitoring method; simply visit your local pond(s) and make observations of the five target species during the time you have available.

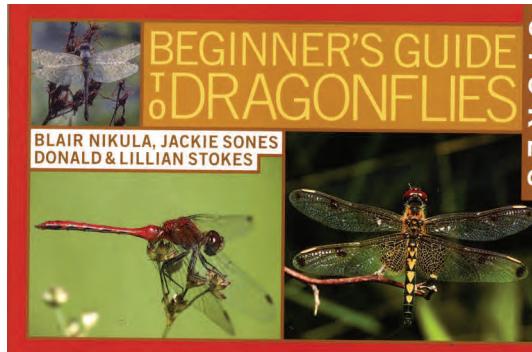


Above and left,
Dragonfly hatch
captured by Water
Resources in June of
2005



Clockwise from Above:
Black Saddlebags,
Common Green Darner,
Wandering Glider,
Variegated Meadowhawk,
Spot Winged Glider

No prior experience with dragonflies is needed—recognizing these five species is easy to learn! Check out the MDP Field Guide to Migratory Dragonflies (http://www.xerces.org/wp-content/uploads/2012/03/MDP_Field_Guide_8-3-2012_Final_Websec2.pdf) to start learning how to identify these species. Another great guide for beginners is the Beginner's Guide to Dragonflies seen here at right.



Electronics Recycling Made Easy

We all know that recycling our broken, outdated or simply unwanted electronics is the right thing to do to protect our the environment, but it's not always easy, not to mention costly. Most towns or transfer stations charge per item to be recycled and fees can quickly add up. So it's rare we find anyone willing to step up and take these items from us free of charge. Rarer still that it is one of the big box retailers that dot our landscape.



Best Buy, like the one in Bangor, Maine is one of those retailers that is stepping up to help customers make better choices when it comes to getting rid of our electronic waste. Now you can't show up one day with a truck load of TVs, computers and the like, but you can take items in for recycling regularly.

In the front of the stores, they have bins available for your assorted remotes and controllers, wires, cords and cables, gift cards, CDs, DVDs and cases, ink toner and cartridges, plastic bags and rechargeable batteries. By now you're probably asking

what about the big stuff, TVs, boomboxes (remember those?), cd players and the list goes on. The answer is yes, they'll take that stuff too. You just have to go to the Service Desk in the store. It doesn't get much easier than that. For more information on what they recycle, check out

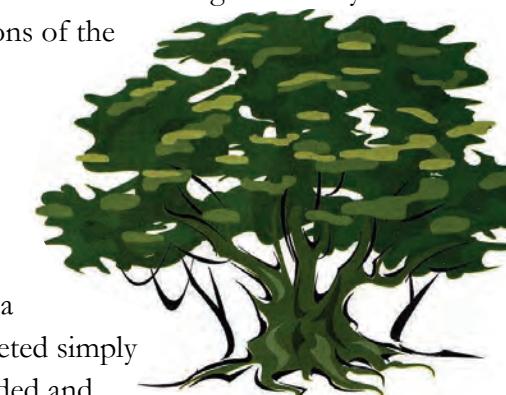
<http://www.bestbuy.com/site/Global-Promotions/Recycling-Electronics/pcmcat149900050025.c?id=pcmcat149900050025>

Or simply go to your favorite internet browser and type **BestBuy Recycling**. There you'll find a wealth of information about items they recycle and the restrictions in each state.

Keep this in mind as you head into your Spring cleaning this year!

Tribal Cemetery Update

Work is continuing on the tribal cemetery. The Advisory Team has been working on a tribal questionnaire with the University of Maine to help guide the process of creating ordinances that will govern the operations of the cemetery. The short questionnaire is designed to help the tribal community give their input on some important issues surrounding this project.



In the very near future, each tribal member over the age of 18 will receive a copy of the questionnaire. Once completed simply return the survey in the envelope provided and you will receive a \$10 stipend for your participation.

We have worked very hard to maintain confidentiality in this process. Each survey will be coded with an identification number for tracking. Although we are working with the university, at no time will your name and address be available

to them. The surveys will be mailed from the tribal offices and returned directly to the university in a self addressed postage paid envelope. The university will report back to us which survey numbers have been returned so that we can issue stipends. The university will not have access to your personal information and we will not have access to your answers.

If you have any questions about this process or if you would like to become involved in the cemetery project, please contact Darrell Hanning at 207-538-6025 or Sue Young at 207-532-4273 ext. 202.

The Toxic Ten - Chemicals to Avoid in Personal Care Products

by Cynthia Timm

There are literally hundreds of potentially harmful chemical ingredients in personal care products. I can't emphasize this enough--read ingredients labels! Products can claim to be natural, even organic, without any substantiation necessary. After reading the ingredients, you find a laundry list of synthetic chemicals and petroleum derivatives.

A good rule of thumb: if you can read and recognize the ingredients without taking Chemistry 101, the product is probably somewhat safe. Keep in mind, however, that some natural ingredients, such as lavender and tea tree oil, have been linked to adverse health effects as well.

Ten ingredients that should be avoided in your personal care products:

1. Fragrance (synthetic): Companies can put any chemical they desire into the product and list it as fragrance, since fragrance is considered proprietary. "Fragrance" typically contains a host of harmful chemicals, such as:

- Phthalates (endocrine disruptor, damage to liver & testes, birth defects, carcinogen, linked to asthma in children)
- Parabens (possible carcinogen, hormone disrupter)
- Dioxins (carcinogens)

2. Mercury: Can you believe that mercury is still an ingredient in many eye drops and mascaras? It is listed as "thimerosal". The dangers of mercury include:

- Profound central nervous system effects
- Impairment of heart & lung function
- Birth defects

3. Phthalates: In synthetic fragrances, nail polishes and hair sprays, as well as soft plastic toys and vinyl shower curtains, phthalates can cause:

- Endocrine disruption
- Damage to liver & testes
- Birth defects
- Cancer
- Asthma in children



4. Sodium Lauryl/Laureth Sulfate: Contained in about 95% of foaming products, and 50% of personal care products, it is difficult to find a product that doesn't contain it when you comb through the drug store shelves. SLS can cause:

- Skin and eye irritation
- Hair loss
- Microscopic damage to gum tissue, leading to gum disease and increased incidence of canker sores.
- An increase the permeability of the skin, enhancing the absorption of other potentially harmful chemical ingredients
- It is also usually contaminated with toxic by-products from the manufacturing process.

5. Parabens: These widely used preservatives in cosmetics and hair care products:

- Disrupt hormones
- Increase the risk of certain cancers
- Linked to infertility
- Cause allergic skin reactions & irritation

6. Triclosan & Triclocarban: Commonly used in anti-bacterial products, they:

- Interfere with thyroid function
- Create "super-germs", leading to bacterial resistance to antibiotics
- Weaken the immune system
- Alter sex hormones
- Are linked to birth defects
- Cause cancer
- In the environment and at home, combine with chlorine in tap water to produce dangerous chloroform and chlorinated dioxins (carcinogens)

Funny thing is, antibacterial soaps have not been found to be any more effective at killing germs than plain old soap and water.

Continued page 5

Toxic Top Ten (continued)

7. Placenta: Placenta is added to some hair relaxers and is extremely high in hormones, mainly estrogen. Linked to premature breast and sexual development in young girls.

8. Hydroquinone: Banned in many countries, hydroquinone is a common ingredient in skin lighteners. It is a known carcinogen.

9. Diethanolamine (DEA): Found in almost all conventional soaps, shampoos, conditioners, lotions and cosmetics, DEA is readily absorbed by the skin and accumulates in the internal organs.

- Skin and eye irritant
 - Causes impaired vision
 - Linked to damage to the kidney, brain, spinal cord, bone marrow, liver and skin in animal tests
 - Combines with common nitrate preservatives in cosmetics to form nitrosodiethanolamine (NDLA)-A potent carcinogen

10. Formaldehyde: Still used as a preservative in many cosmetics, face creams, shampoos, bubble bath, deodorants and nail products, causes:

- Eye, nose and throat irritation
 - Coughing
 - Asthma attacks
 - Nausea
 - Vomiting
 - Nose bleeds
 - Ear infections
 - Headaches
 - Dizziness
 - Weakens the immune system
 - Cancer in animal tests

Fortunately for the health conscious consumer, there are many products on the market formulated without harmful synthetic chemicals. The manufacturers of these products have their customers' health in mind, and product safety is their ultimate goal. They use only natural, mineral and botanical ingredients to create effective, and even glamorous, cosmetics, skin care, hair care and oral care products.

These are infinitely safer than their conventional counterparts, and can help those that are sensitive to or concerned about toxic chemical ingredients.

For more information and articles on this topic, visit "Articles & Links" at Hibiscus Naturals:
<http://www.hibiscusnaturals.com/Learn-the-Facts-at-Hibiscus-Naturals-s/18.htm>

Dreaming of Fiddleheads

With the arrival of Spring on the calendar, many people start thinking of smelts, trout and fiddleheads. Although we still have plenty of snow on the ground, and will probably get another dusting or two before its all over, here's a new recipe to try once fiddlehead season arrives.



Pickled Fiddleheads

- 1/2 pound fiddlehead ferns
- Kosher salt
- 1/2 cup apple cider vinegar
- 1/2 teaspoon mustard seeds
- 1/2 teaspoon dill seeds
- 1/4 teaspoon black peppercorns
- 2 allspice berries
- 1 garlic clove smashed

1. Place fiddleheads in a large bowl of cold water and wash well. Rub away any brown chaff and trim cut ends.
2. Add two tablespoons of salt to two quarts of water in a medium saucepan and bring to a boil over high heat. Add fiddlehead ferns and cook for 10 minutes. Drain and rinse with cold water.
3. Combine vinegar 1/2 cup water, and 1 teaspoon salt in a small saucepan and bring to a boil. Place spices and garlic cloves in the bottom of a prepared pint jar. Pack fiddleheads into the jar and add hot pickling liquid to cover.
4. Wipe rim, apply lid and ring and process in a small boiling water bath canner for 10 minutes. Remove jar from canner and let cool on a folded kitchen towel. When jar is cool enough to handle, remove ring and check seal.
5. Sealed jars can be stored in the pantry for up to one year. Unsealed jars should be refrigerated and used promptly. Let the pickles age for at least one week before eating.

Time: 45 minutes

Makes: 1 pint