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MFA Newsletter Vol. 24 No. 3 Summer 2022 The Minnesota Woodlands newsletter is published by the Minnesota Forestry Association.

MFA Board Meetings Conference Calls 8 - 9 a.m.

- August 9, 2022
- September 13, 2022
- October 11, 2022
- November 8, 2022
- December 13, 2022

From the President

Summer is well underway and for the most part, at least the northern sector of the state has recovered from last year's drought, as indicated by the new growth on this red pine tree in my front yard. Summer rain plays an important role in keeping trees growing healthy and vibrant. The lack of rain is an additional stressor on trees that promotes more issues for insects and disease.

Speaking of insects, I got a call earlier this month on the MFA phone line about a suspicious looking stress on an ash tree in the southern part of the state. I recommended the caller get some advice from a local professional to identify whether or not it was emerald ash borer. It is important to identify



Dave Roerick

insect and disease issues early on to prevent, mitigate, and reduce further spread, especially with something as potentially devastating as emerald ash borer. Minnesota has about 1,000,000 acres of ash trees, which equates to about 1 billion trees total. Ash trees play a very important role in the forest ecosystem, especially in wetland areas where millions of gallons of water are transformed through evapotranspiration, maintaining a wetland as a forested type. Without this, the overwhelming amount of available water will cause the forested wetland to transition to open wetland or cattail swamp. A transition of this type will create a huge change in the structure and function of these wetlands.

As summer wains and the daylight hours begin to decrease, hopefully along with the mosquito population, now is a good time to begin thinking about projects to be working on this fall as the weather becomes more enjoyable in the woods. Don't forget about cost share opportunities, which are available on a regular basis. Whether you want to plant trees, do some improvement to your growing forest, or create or enhance wildlife habitat, cost sharing opportunities abound with the Natural Resources Conservation Service and the Minnesota Department of Natural Resources. Check out the MFA website for more information or feel free to give me a call at 218-879-5100.

Your President,

Dave

Editor Kassandra Tuten editor@minnesota forestry.org

Graphic Design Peg Churchwell Lady Dog Design PegChurchwell17@ gmail.com

Conservation Field Day - Save the Date

Join us on Saturday, Oct. 8, in Collegeville, Minn., for a field day with tours for anyone interested in learning practical techniques to improve the land in different habitats. See page 6 for more details. CSBSJU.EDU/OUTDOORU.



Minnesota Forestry Association

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Away from home for a time? Please contact the MFA office if you'll be away from home for an extended time and let us know when you'll be back. We'll hold onto the newsletter until you return so you won't miss a single issue! Email info@minnesotaforestry.org or call 218-879-5100.

Our Shared Bookshelf: Recipe Edition



Each issue, we'll be selecting a favorite book to share with our readers to help build community and encourage the sharing of resources. If you'd like to submit a recommendation for Our Shared Bookshelf, please email Editor@MinnesotaForestry.org. We look forward to hearing about what everyone is reading and enjoying!

This edition, we're highlighting how to forage for dandelions, and some of the tasty ways to use them. Thanks to Cheryl Batson, Minnesota Master Naturalist, for sharing in the June

edition of the Minnesota Women's Woodland Network newsletter.

Spring through September is harvest season for the versatile dandelion, an herb imported from Europe. All parts of this plant are edible; however, make sure you harvest in an area that has not been treated with chemicals. Healthline states that dandelion is high in vitamin A, vitamin C, potassium, folate, calcium, and vitamin K. As with any wild food, eat in small amounts to make sure you are not allergic, and check with your doctor before eating any wild food when you are pregnant or have any medical conditions. Dandelions can thin out the blood due to the vitamin K and possibly lower blood sugar to some extent.

Most people can identify dandelion. However, some people confuse dandelion with the yellow hawkweed family. This should not be difficult as long as you pay attention to the shape of the leaves and the width of the petals of hawkweed, and the length of the flower stem in its mature form.

Many people will eat dandelion leaves all season long. However, the young leaves harvested before the flower buds open in shady areas are the least bitter. Simply harvest young leaves and put directly in a salad mixed with other greens of your choice. The more bitter leaves typically are boiled first and eaten like spinach.

One of my favorite ways to use the flowers of dandelion is to snip them off at the head early in the morning and then wash them free of any dirt or insects in a colander. Pour two cups of boiling water over five flower heads and let steep 10 to 15 minutes. If you wish, add 1 tablespoon of lime and a little honey or sugar. You can also refrigerate and have as iced tea.

Dandelion root coffee makes a close substitute for real coffee without the caffeine. Harvest the roots, scrub them free of dirt, and let them dry overnight or until brittle. Chop them into small pieces about a half-inch long. Cook in an oven heated to 350 degrees Fahrenheit until you notice a smoky aroma—around



10 to 20 minutes, depending on the thickness of your roots. Put 1 to 2 tablespoons of the roots in a tea ball. Boil in water for 10-15 minutes and enjoy!



Creature Feature

By Kassandra Tuten, Editor

Tricolored Bat

The tricolored bat (*Perimyotis subflavus*), also known as the eastern pipistrelle, is the smallest of Minnesota's seven known bat species, weighing about as much as a nickel. This species can be distinguished by its coloration, with forearms that tend to be pink rather than the brown of other bats. The tricolored bat ranges over most of the eastern United States and southeastern Canada and was first discovered in Minnesota in 1934.

Tricolored bats hibernate in caves, mines, and tunnels. While this species is often found hibernating in the same sites as large populations of other bats, such as little brown bats (*Myotis lucifugus*) and northern myotis (*M. septentrionalis*), tricolored bats tend to occupy the deeper portions of the hibernaculum where temperatures and humidity are higher. In the summer, tricolored bats generally roost singly, often in trees, but some males and non-reproductive females also roost in their winter hibernaculum.

Tricolored bats mate in the fall, and females give birth to litters, usually of two young, in the spring. While the young are growing, the mothers roost in small maternity colonies. (Maternity colonies have not yet been located in Minnesota.) After about four weeks, the young are able to fly and will accompany their mothers on foraging flights. They become independent after another week or two. Tricolored bats forage (mainly over water) early in the evening, and may catch up to half their body weight in insects each hour. They eat moths, flies, beetles, and ants.

The tricolored bat has rarely been found in Minnesota during the summer months. During winter, this species has been observed hibernating as far north as Soudan Mine in St. Louis County. It is the longest hibernating bat in the state, usually being the first to enter caves and the last to leave.

Tricolored bats hibernate from October to April. During this time, they enter a state of torpor in which their body temperature drops to that of the surrounding air temperature. Human activity in caves where bats are hibernating can be detrimental, causing disturbed bats to awaken frequently during the winter. Such disturbance may result in bats emerging from the hibernaculum early, before there is an adequate supply of insects for them to feed on, or they may fail to awaken altogether.

The species was designated as a species of special concern in Minnesota in 1984. Due to its small population size in the state, its susceptibility to disturbance during hibernation, and the potential for persecution, the tricolored bat remains listed as a special concern species.

The tricolored bat is also highly impacted by White Nose Syndrome (WNS), a disease that has killed millions of bats across North America since first discovered in New York state in the winter of 2006-07. Infected bats often have white fungus growing around their muzzle—the "white nose" that gives the disease its name—as well as on their



The tricolored bat is the smallest of Minnesota's seven known bat species, weighing about as much as a nickel. The species was designated as a species of special concern in Minnesota in 1984.

wings, tail, and ears. As of summer 2021, bats in 37 states and seven provinces have been confirmed with the disease. WNS was first confirmed in Minnesota's bats during the winter of 2016-17.

What you can do to help Minnesota's bats

- Prevent the spread of WNS by honoring cave closures and gated caves and avoiding caves and mines where bats hibernate.
- Do not disturb hibernating bats or their hibernacula.
- Don't exclude bats from buildings during winter or when females are raising young (May-August).
- Report sick or dead bats and groups of bats.
- Enhance bat habitat on your property by retaining large trees, protecting wetlands, and constructing homes for bats.



Oak wilt or not oak wilt? That is the question!

By Val Cervenka, DNR forest health program consultant

As a woodland owner, you have likely heard of oak wilt, but you might be wondering how to know if your tree is infected or if you can do anything about it.

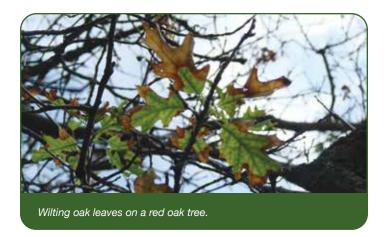
Let's start with the bottom-line message of prevention being the best way to manage oak wilt. Don't prune or wound your oaks from April through July (this means avoiding activities in your woods that could injure any part of an oak), when the wilt-transmitting beetles are flying and may be covered in oak wilt spores from a nearby infected tree. If you must prune, cover the wound immediately with shellac or a water-based paint to limit beetle attraction.

Next, what type of oak trees do you have in your woodland? Oaks in the red oak group have pointed leaf tips, and those in the white oak group have rounded leaf tips. Red oaks are affected more dramatically than white oaks and die soon after infection. White and bur oaks can take years to die.

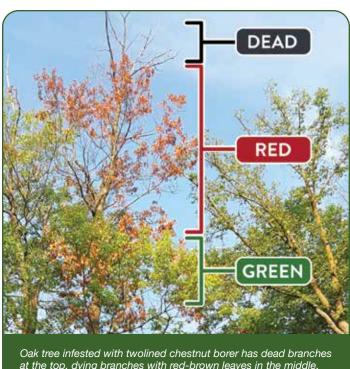


Difference between leaves of oaks in the red oak family versus white oak family.

Now, how do you know if your tree has oak wilt? A red oak tree with oak wilt may lose most of its leaves in one to two months, before normal leaf drop in autumn. White and bur oaks can shed some leaves in one or two months, but only from one or a few outer-canopy branch ends at a time. Don't let just anyone tell you that your tree has oak wilt and that it needs to be cut down, because something else might be affecting your tree. To know for sure, submit a sample to the UMN Plant Disease Clinic.



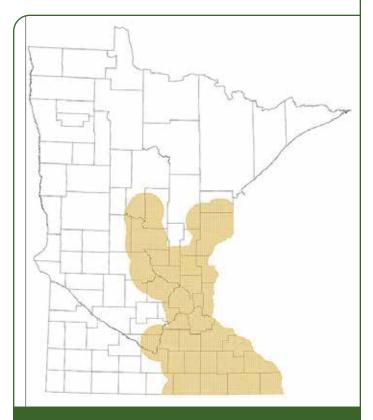
But what if only the top of the tree looks like it's dying? Then the cause might be twolined chestnut borer, a beetle whose larvae feed below the bark and slowly kill the tree, leaving a distinctive pattern of dead branches at the top, dying branches with red-brown leaves in the middle, and green leaves at the bottom of the canopy: "dead, red, and green." Twolined chestnut borer is a native killer of stressed oaks, which is a common occurrence after a drought (you might start seeing more trees with twolined chestnut borer damage in the next few years due to the 2021 drought).



at the top, dying branches with red-brown leaves in the middle, and green leaves at the bottom of the canopy.

What do you do next, if you have confirmed your tree has oak wilt? Admittedly, managing oak wilt is tricky, but there are several options available to woodland owners. Refer to the Minnesota DNR Oak Wilt Guide or contact a DNR stewardship forester for precise management details.

Finally, the DNR forest health staff want to alert people that oak wilt is spreading north to areas where it has never been in Minnesota. If you find oak wilt at the edge of its current range north of Hinckley, Mora, and Little Falls, or west of Little Falls and St. Cloud, please report it to the Great Lakes Early Detection Network (gledn.org) or to your nearest DNR Forestry office. When we know where oak wilt is, we can take steps to manage it early, before it spreads farther.



The shaded area is the oak wilt high-risk zone and shows the known range of oak wilt in Minnesota as of October 2021.

MFA is saddened to report the passing of long-time MFA member and former MFA Board member Allan Schacht at the age of 84. Al contributed greatly to MFA and he will be missed. Memorials preferred to the Alzheimer's Foundation or the Arbor Day Foundation.

Register for the Inaugural Women's Forest Congress

Registration is open for the inaugural in-person Women's Forest Congress, taking place Oct. 17-20 in Minneapolis. The Congress is open to all who are aligned in creating safe spaces to



connect, inspire, and act as catalysts for change for the benefit of forests and all who rely on them now and in the future. All who are committed to creating community and cultivating change are welcome: trans, non-binary, and gender non-conforming participants are welcome, as are women and allies of all ages, perspectives, cultural backgrounds, professional levels, abilities, and education. Learn more and register at https://americanforests.regfox.com/womens-forest-congress.

MFRC Introduces *Minnesota*Forest Carbon Dashboard

A new, interactive, visual display of annual carbon stocks, net carbon stock flux, and carbon trends associated with Minnesota's forests is now available through a partnership effort of the Minnesota Forest Resources Council (MFRC) and the University of Minnesota Forest Resources Department. The Minnesota Forest Carbon Dashboard uses data from the U.S. Forest Service's Forest Inventory and Analysis Program, which annually estimates carbon within five widely recognized carbon pools associated with Minnesota's forests. The dashboard also presents trends associated with land converted to forest and offers users the opportunity to compare carbon data and trends by forest land ownership, forest types, and by landscape regions. Access the dashboard at https://experience. arcgis.com/experience/28fc7281e9e84168b5ec50b7de24 80c2/.

Join The Family Forest

As a family forest owner, you're invited to join a brandnew virtual community, The Family Forest, a home for forest landowners and the people who support them. The Family Forest is a dedicated online space where people can connect with others who share the same goals and aspirations. This community offers landowners, foresters, and their champions the opportunity to build relationships by using various content formats: question forums, polls, threaded conversations, live events, and sub-groups geared toward specific interests. To join The Family Forest, visit community.forestfoundation.org.



Saturday, Oct. 8, 2022 | 8 a.m. – 4:30 p.m.

A field day for anyone interested in woodlands and nature and to inspire landowners in the care of native plant communities.

After a brief introduction at 8 a.m., break into groups to travel to different parts of the Abbey Arboretum for tours designed to give practical techniques to improve the land in different habitats. Session descriptions online.

Session I Options - 8:30 a.m.

- Oak Regeneration
- Pocket Prairie: Pollinator Gardens
- Invasive Species Control

Session II Options - 10:30 a.m.

- Habitat Restoration Project: Wetlands, Prairie, Oak Savanna
- Pocket Prairie: Pollinator Gardens
- Trail Construction & Maintenance

Session III Options - 1:30 p.m.

- Supplementing Wildlife Habitat
- Tree & Shrub ID
- Trail Construction & Maintenance

Session IV Options - 3:30 p.m.

- Conifer Stewardship
- Natural Shorelines & Stormwater Retention
- Invasive Species Control

Register today to reserve your spot csbsju.edu/outdooru

Session descriptions and area lodging information on event website.

















Tamarack

By Kassandra Tuten, Editor

Tamarack (*Larix laricina*), also known as eastern larch or American larch, is a small to medium-size boreal coniferous and deciduous tree reaching 33-66 feet tall, with a trunk up to 24 inches in diameter. The tamarack is uniquely deciduous for a needle bearing tree growing in Minnesota. The bark is tight, flaky, and pink, but can appear reddish under flaking bark. The leaves are needle-like and grow in clusters on shoots. Needles are light blue-green, turning a brilliant, bright yellow before they fall in the autumn. The cones are the smallest of any larch, with 12-25 seed scales; they are bright red, turning brown and opening to release the seeds when mature.

Tamaracks are cold tolerant, able to survive temperatures down to at least -85°F. They can tolerate a wide range of soil conditions but grow most commonly in swamps, bogs, or muskegs, in wet to moist organic soils such as sphagnum, peat, and woody peat. Tamarack is also fairly well adapted to reproduce successfully on burns. Tamarack is a pioneer species, often the first to move in after disturbance, and typically can be found toward the center or wettest portion of a disturbed bog or peatland.

However, tamarack is very intolerant of shade. Although it can tolerate some shade during the first several years, it must become dominant to survive. When mixed with other species, it must be in the overstory. The shade-intolerance of tamarack dictates the use of even-aged management. Some adaptation of clear cutting or seed-tree cutting is generally considered the best silvicultural system.

Tamarack stands cast light shade and so usually have a dense undergrowth of shrubs and herbs including dwarf and swamp birch, willows, speckled alder, red-osier dogwood, bog Labrador tea, small cranberry, cottongrass, three-leaved false Solomon's seal, sphagnum moss, and more.

Tamarack has thin bark and is highly susceptible to fire damage. It is also susceptible to high winds, which can uproot large tamarack trees growing in swamps or other wetland sites where rooting is shallow. It has also been discovered that abnormally high water levels often kill tamarack stands. Those that survive under such conditions usually grow very slowly. Other effects of high water include dieback and the development of adventitious roots and shoots. Wetland road crossings and beaver damming are the primary causes of flooding.

Many insect species are known to be destructive to

tamaracks. The non-indigenous larch sawfly is the most destructive. Epidemics occur periodically across Canada and the northern United States and have caused tremendous losses of merchantable tamarack throughout most of the tree's range. In Northern Minnesota, imported parasites of the sawfly have become established and should reduce the frequency and duration of future outbreaks.

The wood of tamarack is tough and durable, but also flexible in thin strips, and was used by the Algonquian people to make snowshoes. The aboriginal peoples of Canada's northwest regions used the inner bark to treat cuts, infected wounds, frostbite, and more. Currently, the wood is used principally for pulpwood, but also for posts, poles, cribbing, kraft paper, rough lumber, fuelwood, and as kickboards in horse stables. It is also grown as an ornamental tree in gardens in cold regions.

Wildlife use tamarack for food and nesting. Porcupines eat the inner bark, snowshoe hares feed on tamarack seedlings, and red squirrels eat the seeds. Birds that frequent tamaracks during the summer include the white-throated sparrow, song sparrow, veery, common yellowthroat, and Nashville warbler.





Young cones are red or greenish, mature cones are light brown; 3/4 inch long; nearly spherical; open in the fall to release small winged seeds. Cones often remain on trees several years.

Upcoming Events

Find more events, and more information on these events, at the MFA website, <u>www.MinnesotaForestry.org</u>.or by calling MFA at 218-879-5100.

AUGUST

Webinar: Work on Golden-Winged Warblers and Other Early Successional Birds

9-10 a.m., Tuesday, Aug. 23

Minnesota's forests provide critical breeding habitat for hundreds of resident and migrating bird species. Forest management provides an important opportunity to conserve and cultivate critical habitat for species of conservation concern including golden-winged warbler, veery, and American woodcock. Learn about characteristics of young forests and identify forest management actions that maximize breeding season productivity for these bird species. Learn more at https://sfec.cfans.umn.edu/2022-webinar-august.

SEPTEMBER

Timber Sale Design for Wildlife Planning (Cook) Wednesday, Sept. 7

This field day will focus on tweaks foresters can make to their timber sale plans to improve the wildlife habitat outcomes of those treatments. Learn more at https://sfec.cfans.umn.edu/ts-design22.

ECS Silviculture: Mesic Hardwood Forests (Remer area)

Tuesday, Sept. 13

Tour mesic hardwood communities managed by DNR Forestry and the Itasca County Land Department. Discussions will be wide ranging based on attendee interests, but will focus on managing for hardwood quality, ironwood management, and related topics. Learn more at https://sfec.cfans.umn.edu/ecssilv-mh-22.

North Star Expo

Sept. 16-17, Itasca County Fairgrounds, Grand Rapids

Attend the 68th annual North Star Expo—Minnesota's largest logging equipment show. The Expo features more than 100 exhibitors, including over \$15 million in the latest logging, trucking, and sawmill equipment and technology. Loggers, vendors, and timber industry representatives from Minnesota and around the Upper Midwest will attend, as well as lawmakers, policy makers, and other stakeholders from around the state. Learn more at www.minnesotaforestry.org.



PO Box 6060 Grand Rapids, MN 55744 www.MinnesotaForestry.org

Change Service Requested

Fridays with a Forester

UMN Extension recently completed the Fridays with a Forester series. Watch them all at

https://www.youtube.com/c/MyMinnesotaWoods/playlists.

Webinar: Adaptive Silviculture for Climate Change: Lessons for Timber-Oriented Managers

9-10 a.m., Tuesday, Sept. 20

Learn about research results of interest to stakeholders having timber (or revenue) production as primary objectives. Learn more at https://sfec.cfans.umn.edu/2022-webinar-september.

Field Day: Adaptive Silviculture Lessons for Timber Oriented Managers

9 a.m. to 3 p.m., Wednesday, Sept. 28

This is a field day, following a Sept. 20 presentation by the same name. Learn more at https://sfec.cfans.umn.edu/ascc-timber-field.