Wisconsin Urban & Community Forests
A Quarterly Newsletter of the Wisconsin Department of Natural Resources, Forestry Division

Wisconsin's Street Trees— Their Composition, Value and Issues

by Dick Rideout, State Urban Forestry Coordinator
DNR Division of Forestry

Wisconsin DNR partnered with the USDA Forest Service to do two pilot studies of the state's urban forests. The first study assessed the entire urban forest across all property boundaries, which I reported on in our fall 2008 issue. The second study focused on community street trees, which are the traditional responsibility of city and village foresters. The results of this study provide some fascinating information about this local resource as a whole and some cautionary tales for communities.

Character of Wisconsin's Community Roadsides

There are over 16,000 miles of roadway in Wisconsin's communities. Of those, 81% are in areas classified as residential, 14% are commercial and 3% are industrial. About 92% of all street trees occur in residential areas.

The average right-of-way width encountered on the plots was 13.5 feet, ranging from 0 to more than 100 feet. Over 35% of plot areas were covered with an impervious material, such as asphalt or concrete, primarily sidewalks and driveways. The remaining area of the plots was mostly vegetation or bare soil. Almost half the plots had trees, however analysis that considered available planting space showed that Wisconsin streets are about 60% stocked with trees. Tree canopy cover on the plots was about 24%, and 31% of the plots sampled were influenced by shade from trees that were not in the plot, showing that a significant number of private trees may serve as, or compete with, public street trees.

Overhead utility wires and sidewalks are features of roadside rights-of-way that both affect the growth of trees and are themselves affected by tree growth. The study assessed each tree to determine if it had a conflict with either overhead wires or hardscape. Overall, 14% of street trees conflicted with wires, but only 3% had sidewalk conflicts. Not surprisingly, wire conflicts were significantly higher (31%) in industrial areas and sidewalk conflicts were almost exclusively in residential areas.

Wisconsin's Street Trees

The study estimated that Wisconsin communities have a little over 1 million street trees and space for about 400,000 more. There were 88 species of trees adjacent to our community streets representing 35 genera and 19 families. While this may sound like a diverse population, the number of species—that is species richness—only tells part of the story. Species evenness—the relative abundance of each species—is the other part, and this paints a very different picture. Maple, ash, honeylocust and linden make up 79% of all species of Wisconsin street trees. Table 1 shows the frequency of the top ten species along our roadways.

Species	Common name	Percent of sample
Acer platanoides	Norway maple	30.5
Fraxinus pennsylvanica	Green ash	15.2
Gleditsia triacanthos	Honeylocust	8.4
Tilia cordata	Littleleaf linden	6.6
Acer saccharinum	Silver maple	6.3
Fraxinus americana	White ash	3.9
Acer saccharum	Sugar maple	3.7
Malus sp.	Crabapple	3.2
Ulmus thomasii	Rock elm	2.3
Acer rubrum	Red maple	2.1
all other	78 species	17.8

Table 1. Species Composition. Percentages of the 10 most frequent species alongWisconsin's urban roadways.

Wisconsin street trees average 12.8 inches in diameter, 34 feet in height and a crown spread of 25 feet, which would be considered well-established "mid-sized" trees. Figure 1 shows the diameter distribution of the 10 most common street trees.

The health of Wisconsin's street trees was measured by evaluating the condition of the crown (density and dieback) and assessing any visible damage to the tree.

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Volume 17 Number 2

Summer 2009

Inside this issue:

Save the Date—
Annual Urban Forestry Conference & Trade Show
February 7–9, 2010
Green Bay, WI

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Community Profile:

Population: 15,169

Tree City USA: 18 years.

Growth Award: 2 years

Number of Parks: 17

Total Park Acres: 350

Miles of Streets: 66.54

Municipal Cemetery: 1

Program Profile:

Director of Facilities: David Stoiser

Parks, Forestry & Facility Supervisor: John Neumann

Community Activities Administrator: Evonne Koeppen

2008 Forestry Budget: $74598

Equipment:

1 aerial truck

2 chippers

2 water trucks

Community Profile:

City of Beaver Dam

by John Neumann, Parks, Forestry & Facility Supervisor and Evonne Koeppen, Community Activities & Services Administrator

Beaver Dam is located in northwest Dodge County, midway between Fond du Lac and Madison along US Highway 151. In 1841, early settlers recognized the value of damming the Beaver Dam River to use waterpower to run a gristmill and sawmill. In 1842 a series of dams were constructed along the river and the shallow valley upriver began filling in to create Beaver Dam Lake. Beaver Dam Lake is the 16th largest lake in Wisconsin and provides excellent summer and winter fishing. It is also the largest lake in Dodge County, covering 6600 acres, is 14 miles long and has over 41 miles of shoreline.

The city charter was granted in 1856 with prosperous growth occurring over the next 50 years. During that time Dr. G. E. Swan purchased 12 acres of land which included Ackerman's Spring. This pastureland was transformed into a park by the same landscape engineer who designed Lincoln Park in Chicago. Three lakes were excavated and over 2000 trees—elms, oaks, maples, basswood, butternut and walnut—were planted. In 1905 the park was sold to the City of Beaver Dam.

Over the next 105 years the city has continued to support a park system that now includes 19 locations ranging in size from .10 to 158.7 acres. The city has a long-standing reputation in the urban forestry field and recognizes the need for a healthy, sustainable forest. The city takes great pride in not only the number of trees on facility properties, but in being "green" long before it became popular.

Photo: City of Beaver Dam

Members of the Beaver Dam Studies Group pose with Mayor Tom Kennedy and Parks, Forestry & Facility Supervisor John Neumann (holding flag) during an Arbor Day celebration. The Beaver Dam Studies Group sponsored the purchase of a pin oak.

In the mid '70s, Mayor R. Kachelski, through the Department of Public Works, started a city beautification cost-sharing project with city residents to deal with the devastation of trees from Dutch elm disease. This successful program is evident even today. Rules and regulations were developed and set forth to help with species selection and placement to help avoid major problems in the future.

In 1990 the City of Beaver Dam was first recognized as a Tree City USA by the Arbor Day Foundation and continues to be recognized each year. Direction for this achievement originally came from the engineering department and the department of public works. Today these services are handled by the parks & forestry department.

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Published quarterly by the Wisconsin Department of Natural Resources, Forestry Division.

Send your inquiries, address changes, or story ideas to Laura Wyatt, Laura.Wyatt@Wisconsin.gov (608-267-0568), or Dick Rideout, Richard.Rideout@Wisconsin.gov (608-267-0843).

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Contributors: Cindy Casey, Kathy Gonzalez, Don Kissinger, Jeff Roe, Tracy Salisbury, Kim Sebastian, Candice Sovinski, and Olivia Witthun

Articles, news items, photos and ideas are welcome.

This newsletter is available in alternative format upon request and can also be downloaded in PDF format from our Web site: http://dnr.wi.gov/forestry/UF/

For breaking UF news, anecdotes, announcements and networking opportunities, sign up for The Urban Forestry Insider, DNR's twice-monthly e-newsletter. Archives are at http://dnr.wi.gov/forestry/UF/resources/InsiderArchive.html

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Wisconsin Arbor Day Photo Album

Photo: City of Chilton

Fourth grade students, tree board members and community officials from the City of Chilton gather for their Arbor Day celebration. This year they decided to plant a spruce tree in the spot where their annual Christmas tree typically goes. Chilton now has a permanent, living tree to provide benefits year-round. The tree will be decorated in the winter to serve as the community's Christmas tree.

Photo: Scott Musolf, City of Rice Lake

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Steve Olah, City of Rice Lake Parks, Recreation and Cemeteries Department, plants an American Liberty elm during the city's 2009 Arbor Day observance at the city's new National Lumbering Hall of Fame park.

Photo: Tracy Salisbury, WDNRn

Central WI Electric Cooperative receives their first Tree Line USA Award. CWEC serves four counties in central Wisconsin.

Photo: WDNR

South Central Region Urban Forestry Coordinator Jeff Roe presents Mayor Dave Cieslewicz with Madison's 20-year Tree City USA Award.

Photo: Kim Sebastian, WDNR

Four hundred students from Mitchell Elementary School in West Allis celebrated Arbor Day with a tree planting celebration involving fellow students and honored guests via live camera feed while sitting in their multi-purpose room.

Photo: Jeff Roe, WDNR

Students at St. Stephen Lutheran School in Horicon celebrate Arbor Day with a tree planting at River Bend Park.

For more photos visit— http://dnr.wi.gov/forestry/UF/awareness

Students Celebrate Arbor Day at the Capitol

by Tessa Jilot, Forestry Educator
DNR Division of Forestry

The love of trees runs as deep as the roots that support them. To keep this feeling alive, the Department of Natural Resources Forestry Division challenges students from around the state to creatively express their feelings about our tree and forest resources through the National Arbor Day Poster Contest for fifth-grade students, along with the fourth grade Forest Appreciation Week Writing Contest. More than 3800 students from more than 200 Wisconsin schools participated in these contests this year.

This year's poster contest, which is sponsored by the Arbor Day Foundation, provided an opportunity for fifth-grade students to showcase their artistic talents around the theme, "Trees are Terrific … in Cities and Towns!" Entries were narrowed down by local graphic artists and Chief State Forester Paul DeLong, and the top 12 posters—and the three statewide winners—were selected through an online vote, the first time all Wisconsin DNR employees had an opportunity to participate.

This year's poster contest winners were: Sumin Yang of Madison, who attends Shorewood Hills Elementary; Kesley Secrist of Alma, who attends Alma Elementary School; and Rachel Vogel of Kiel, who goes to Valders Middle School. The winning posters can be viewed at the DNR's Environmental Education for Kids website, EEK!, **http://dnr.wi.gov/eek/cool/arbordayposter.htm**.

Photo: WDNR

Students and adults alike were interested in the spade planting of the 8-year-old white swamp oak on the capitol grounds in Madison. The tree, donated by The Bruce Company of Wisconsin, was part of this year's observance of Arbor Day. Youngsters from Weyauwega Elementary School had a chance to meet Smokey Bear and Bucky Badger, read aloud the 2009 Arbor Day proclamation signed earlier this year by Gov. Doyle, and get an up-close urban forestry lesson.

"My Favorite Tree" was the theme of this year's Forest Appreciation Week Writing Contest. Students were asked to write about a tree species they thought was unique or a forest tree with which they had a remarkable experience. This year's winning entry focused on memories of farming, fun and family centered around a big oak tree in the writer's front yard.

This year's essay winners were: Paul Boesl of Boyceville, who attends Prairie Farm Elementary School; Hannah Feller of Reedsburg, who attends South Elementary School in Reedsburg; and Kendra Rosenthal of Coleman, who attends Coleman Elementary School. The winning essays can also be found at to the EEK! website **http://dnr.wi.gov/eek/cool/2009writingwin.htm**.

Photo: Virgina Mayo-Black, WDNR

Sumin Yang, a 5th grade student at Shorewood Hills Elementary School in Madison, was the winner of this year's Arbor Day Poster Contest. She had an opportunity to talk about her artwork at the April 24 state capitol ceremony where she received a plaque, a savings bond, and other prizes from State Senate President Fred Risser and State Rep. Spencer Black of Madison.

On Arbor Day, the winning students, their families, and their teachers were honored at a special achievement ceremony at the state capitol. The children's work was on display—the student-authors read their essays, and the student-artists shared their inspiration with all in attendance. Special guests included Chief State Forester Paul DeLong, author and arborist Bruce Allison, State Senate President Fred Risser, State Rep. Spencer Black of Madison, Smokey Bear and Bucky Badger.

The students received plaques and savings bonds, prizes donated by the Wisconsin Arborist Association (poster winners) and Wisconsin Woodland Owners Association (essay winners). The Wisconsin Nursery Association also donated a tree to each of six students to be planted in their home communities. Teachers of the six winning students were presented with scholarships for both a Project Learning Tree (PLT) and LEAF (Learning Experiences & Activities in Forestry) workshop and classroom supplies.

Preceding the indoor ceremony, an 8-year-old swamp white oak tree was planted on the capitol lawn. This public planting marks the 5th Arbor Day BIG Tree donated to Capitol Park by the Wisconsin Nursery Association, with spade planting donated by the Bruce Company of Wisconsin.

Tree City USA Communities

by Jacinda Tessman, Urban Forestry Office Operations
DNR Division of Forestry

Congratulations to Wisconsin's newest Tree City USA designees: Bayside, Belgium, Cambridge, Columbus, Green Lake, Ladysmith, Osceola and Princeton! With these additions the total number of Tree City USA communities in the state is **174** giving **Wisconsin the third highest ranking in the nation**. Twenty-four of the recertifying Tree Cities also received a Growth Award for going above and beyond the Tree City USA program standards.

To be recognized as a Tree City USA, a community must meet four requirements. It must have 1) a designated tree board or forestry department, 2) an annual forestry program expenditure of at least $2 per capita, 3) a tree ordinance, and 4) observe and proclaim Arbor Day.

The Tree City USA program, sponsored by the Arbor Day Foundation and administered in Wisconsin by the DNR, provides communities with a tangible goal and national recognition for their community forestry efforts.

The Arbor Day Foundation also sponsors the Tree Line USA program. Twelve utilities with Wisconsin service areas received recognition in 2008 by meeting the following criteria: 1) providing quality tree care that follows national tree care and protection standards, 2) providing annual worker training, and 3) sponsoring ongoing tree planting and public outreach.

Congratulations to Wisconsin's 2008 Tree City and Tree Line USA recipients:

2008 Tree Cities

Adams
Albany*
Algoma*
Allouez
Amherst
Antigo
Appleton*
Ashland
Ashwaubenon
Baldwin
Baraboo
Bayfield
Bayside
Beaver Dam*
Belgium
Bellevue
Beloit
Bloomer
Blue Mounds
Brillion
Brookfield
Brown Deer
Cambridge
Campbellsport
Cedarburg
Chenequa
Chilton
Chippewa Falls
Clinton*
Clintonville
Columbus
Combined Locks
Cottage Grove
Cudahy
De Pere
DeForest
Delafield
Delavan
Denmark
Dresser
Dunn, Town (Dane)
Eau Claire
Edgar
Elkhorn
Elm Grove
Evansville
Fitchburg*
Fond du Lac
Fontana
Fort Atkinson*
Fort McCoy*
Fox Point
Franklin
Fredonia
Fremont
Germantown
Gilman
Glendale
Grafton
Grand Chute, Town (Outagamie)
Green Bay
Green Lake
Greendale
Greenfield*
Greenville, Town (Outagamie)*
Hales Corners
Hartford
Hillsboro
Hobart
Horicon
Howard
Jackson
Janesville*
Jefferson
Johnson Creek
Kaukauna
Kenosha
Kewaunee
Kimberly
La Crosse
Ladysmith
Lake Geneva
Lake Mills
Lawrence, Town (Brown)
Little Chute
Lodi
Madison, City*
Madison, Town (Dane)
Manitowoc*
Maple Bluff
Marinette
Marion*
Marshfield*
Medford
Menasha
Menasha, Town (Winnebago)
Menomonee Falls
Menomonie
Mequon
Merrill
Middleton*
Milwaukee*
Mineral Point
Monona
Monroe
Monticello
Mount Horeb
Muskego
Neenah
New Glarus
New Holstein
New London
Niagara
North Fond du Lac
Oak Creek
Oakfield
Osceola
Oconomowoc
Oconto*
Onalaska*
Oshkosh
Owen
Paddock Lake
Phillips
Platteville
Plover
Plymouth
Port Washington
Portage
Pound
Princeton
Rice Lake
Richland Center
Ripon
River Falls
Rosendale
Rothschild
Saukville
Shawano
Sheboygan
Sherwood
Shorewood
Shorewood Hills*
Spooner
Stevens Point*
Stoughton*
Sturgeon Bay
Sun Prairie
Superior
Thorp
Turtle Lake
Two Rivers
Valders
Verona
Viola
Washburn
Waterford, Village
Waterloo
Watertown
Waukesha*
Waunakee
Waupaca
Waupun
Wausau
Wautoma
Wauwatosa
Wescott, Town (Shawano)
West Allis
West Bend
Weyauwega
Whitefish Bay
Whitewater
Whiting
Williams Bay
Wisconsin Rapids

Note:
Asterisk (*) indicates Growth Award recipient
bold text indicates new Tree City

Photo: Jeff Roe, WDNR

Students at Aldo Leopold Elementary School in Madison celebrate 20 years as a Tree City USA during a tree planting Arbor Day celebration. Madison School Superintendent Dr. Nerad (left) and Madison Mayor Cieslewicz (right) hold the flag.

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To learn how your community can become a Tree City USA, contact your DNR regional urban forestry coordinator (contact information on back cover of newsletter) or visit the DNR website at http://dnr.wi.gov/forestry/UF/awareness/.

TREE CITY USA

TREE LINE USA

Tree Line USA 2008 Utilities

Alliant Energy
Central Wisconsin Electric Cooperative
East Central Energy
Madison Gas & Electric
Pierce Pepin Cooperative
Richland Electric Coop
Shawano Municipal Utility
Stoughton Utilities
Vernon Electric
WE Energies
WI Public Service Corp.
Xcel Energy

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Community Tree Profile:

Scarlet oak (Quercus coccinea)

by Laura G. Jull, Associate Professor & Extension Specialist
Dept. of Horticulture, University of Wisconsin–Madison

Photo: J.C. Raulston

Scarlet Oak

Photo: J.C. Raulston

Scarlet oak foliage

Native To: eastern and Midwestern US on dry, sandy, upland sites; there are naturalized populations in extreme south-central Wisconsin, according to the UW–Madison Herbarium and USDA plants databases

Mature Height: 70–80'

Spread: 50–60'

Form: pyramidal when young, becoming open, rounded with age; lower branches do not droop as low as pin and northern pin oak branches

Growth Rate: moderate to fast

Foliage: Alternate, simple, oblong; 3–6" long, 2–4" wide; glabrous, glossy, darker green leaves with 5 to 7 pointed lobes that are deeply cut (nearly to the midrib) into C-shaped sinuses that almost touch at the tips. Each lobe ends in a bristle tip. Leaf is shorter than northern red oak leaves. Leaf base is truncate (straight across) to broadly cuneate (wedge-shaped). Vein axils on the undersides of the leaves are sometimes hairy.

Buds and Stems: Buds are alternate, plump, imbricate, blunt tipped and are in clusters at the ends of the branches. Buds are ovate, ¼–⅜" long, reddish brown with gray pubescence on the upper half of the bud scales. Younger stems are light brown to reddish brown, glabrous, dotted with small, gray lenticels; older stems are greenish. Oak pith is star shaped (stellate) in cross section.

Fall Color: Showy, red to scarlet, developing later in fall. Leaves eventually turn russet-red and hold late into early to mid winter, especially on younger trees.

Flowers: Not ornamental, green to yellowish green, monoecious (unisex). Male flowers are in catkins borne in pendulous clusters; female flowers are borne in the axils of new leaves and have a 6-lobed calyx that is partially enclosed by an involucre bract; they are borne solitary or in tiny spikes in the axils of new leaves. Both flowers occur in early spring and have no fragrance. Male flowers produce lots of pollen that can cause allergies in humans.

Fruit: Brown nut produced in late summer to fall that matures in two years and germinates in spring. The nut is borne solitary or in pairs, ½–1" long, oval with concentric rings near the tip of the acorn, enclosed ⅓–½ of its length by a deep, bowl-like, involucre bract (cap) with tight, overlapping scales. The acorn cap is robust, thick, covers most of the nut and curls back in on the bottom edge; cap appears overgrown for the size of the nut. The nut is highly prized by mammals and birds and can be eaten by humans if roasted first, then ground into flour.

Bark: Smooth when young, becoming dark gray–brown to blackish, divided into irregular, scaly ridges that are often mottled with gray. The gray ridges are broken and not continuous like the bark of northern red oak. Bark is furrowed at the base of the tree and becomes smooth higher up the tree and on branches. On older trunks, the last 3–5' of the trunk base becomes cobblestone-like, warty and black. Bark on young trees is thin and can be easily damaged. The inner bark of scarlet oak is pinkish red versus yellow for black oak, which looks very similar in leaf appearance.

Site Requirements: Full sun; prefers a sandy loam, moist, well-drained, slightly acidic soil, but does tolerate drier soils. Oaks are very sensitive to soil compaction and construction injury. Can get chlorotic in high-pH soils. Moderate salt tolerance; not very urban tolerant unless the soils are well drained and acidic. Difficult to transplant so dig and plant in spring.

Hardiness Zone: 4b/5a; selection of cold hardy, northern provenance material (geographic seed source) is critical for all oaks, as the native ranges often extend from the northern to southern US

Insect & Disease Problems: Susceptible to oak wilt, gypsy moth, and two-lined chestnut borer. Scarlet oak can also get forest tent caterpillar, cankerworm, leaf blister, various galls, scale, anthracnose, cankers, bacterial leaf scorch, twig blights, leaf spot, powdery mildew and spider mites, but usually none serious except for oak wilt, gypsy moth and chestnut borers. Because of oak's susceptibility to oak wilt, do not prune oaks during the growing season. Only prune them when dormant (before April 1) if possible or, if removal of limbs is necessary during the growing season, immediately treat tree wounds with either tree paint or wound compound to prevent the sap-feeding beetle from transferring the oak wilt fungus to open wounds. Application of tree paint or wound compound is only necessary when pruning oaks or elms during the growing season, otherwise it impedes wound closure and can trap moisture inside the wound.

Suggested Applications: Scarlet oak is a nice, native, non-invasive shade tree that can be used in residential neighborhoods as well as in parks. The fall color is excellent and lasts long into the season. The fruit attracts wildlife.

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Community Tree Management Institute —Municipal Tree Managers Apply Now!

The Community Tree Management Institute (CTMI) is a new, advanced training course designed for Wisconsin municipal employees with tree related responsibilities but without a strong background in urban forestry. See details at right.

Dates and Locations:

There are three CTMI sessions scheduled for 2009–2010. To be accepted into the program, participants must be able to attend all three sessions. Attendance is limited to 30 participants.

Session I

Management and Administration
November 10–11, 2009
Green Lake, WI

Session II

Technical and Policy Issues
February 23–24, 2010
Green Lake, WI

Session III

Field Operations—Tour
June 22, 2010
Stevens Point, WI

Program Cost: $325

Fees include all course materials, meal and lodging costs for sessions I & II and meal costs for session III. Participants are responsible for their own travel costs. Application deadline is September 1, 2009.

Please contact your Regional Urban Forestry Coordinator (see back cover) for more information.

CTMI is sponsored by the Wisconsin Department of Natural Resources in cooperation with the UW–Extension and UW–Stevens Point College of Natural Resources.

Scarlet Oak, continued from page 6

Limitations: Acorns under tree can become a litter problem. Tends to retain its dead branches. Casts dense shade, hence it is hard to grow grass beneath the tree. Less tolerant to urban conditions than pin, chinkapin, or swamp white oaks. Not as readily available in the northern nursery trade as some of the other oaks.

Comments: Scarlet oak's attractive fall color, glossy green leaves and fruit that attracts wildlife add interest to both native and ornamental landscapes. It is not as common as some of the other oaks, but makes a very pretty tree in the landscape.

Common Cultivars or Selections: None, but the species is closely related to black, pin and northern pin oaks.

References:

Manual of Woody Landscape Plants: Their Identification, Ornamental Characteristics, Culture, Propagation and Uses, 5th ed. 1998, by Michael A. Dirr, Stipes Publishing, Champaign, IL.

Native Trees of the Midwest: Identification, Wildlife Values, and Landscaping Use, 2005, by Sally S. Weeks, Harmon P. Weeks, Jr., and George R. Parker, Purdue University Press, West Lafayette, IN.

Trees of the Central Hardwood Forests of North America: An Identification and Cultivation Guide, 1998, by Donald J. Leopold, William C. McComb, and Robert N. Muller, Timber Press, Portland, OR.

Trees for Urban and Suburban Landscapes, 1997, by Edward F. Gilman, Delmar Publishers, Albany, NY.

What Damaged This Tree?

Turn to page 15 to find out. . .

Photo: Jeff Roe, WDNR

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Urban Tree Health Matters:

Spruce Needle Rust Disease

by Kyoko Scanlon, Plant Pest & Disease Specialist
WDNR Division of Forestry

Photo: Kyoko Scanlon, WDNR

Needles infected with Weir's cushion rust. Note: One-year needles exhibit pustules while new shoots are expanding.

Needles infected with spruce needle rust disease first show yellow bands, and later, a white tongue-like or tombstone-like growth appears on the yellow bands. These structures (pustules) erupt and disperse yellowish to pale orange spores. When needles are heavily infected, the entire tree may look rather yellowish, not greenish. This crown symptom concerns many homeowners. The disease is commonly seen on black, Colorado blue, white, and to a lesser extent, Norway spruce. Spruce needle rust is caused by the fungi that belong to the genus Chrysomyxa. There are about 30 species of the genus Chrysomyxa known in the world. Many of them require an alternate host in the Ericaceae (heath) family to complete their life cycle. Major alternate hosts of spruce needle rust in Wisconsin are swamp heath plants, such as labrador tea and leather leaf. However, there is one species (*C. weirii*) that is capable of attacking spruce needles directly without an alternate host. The spruce needle rust disease that is caused by *C. weirii* is called Weir's cushion rust or repeating spruce needle rust. Both types of spruce needle rust have been found in Wisconsin.

The life cycle of the spruce needle rust with an alternate host is like this. In spring, spores are dispersed from leaves of alternate hosts and are carried by wind to infect the new shoot growth of spruce. Yellow bands and whitish blisters are evident by mid to late summer and orange spores are wind blown to attack alternate hosts. The fungus overwinters on the leaves of alternate hosts. Most infected spruce needles drop off by the fall. When the infection is severe up to 3/4 of the current year's needles may be lost. Though repeated infection will slow the growth, the disease seldom kills a tree and chemical control is usually not necessary. It is always a good idea to take measures to maintain the health of the trees, such as watering during dry periods, properly mulching and fertilizing, and minimizing wounding and soil disturbance.

The fungus of Weir's cushion rust attacks new shoots in the spring. Infected needles exhibit yellow spots by summer, however white pustules are not typically produced until the following spring, right before new shoots begin to grow. Spores produced from one-year needles attack new growth of spruce in spring to repeat the infection. Since Weir's cushion rust is capable of repeating attacks and spreading directly from spruce to spruce without an alternate host, the damage could be more serious. If heavy infection is observed, a fungicide that contains chlorothalonil can be applied to trees to protect new shoots from infection. Good coverage of the fungicide and proper timing of the application are essential to be effective. The first application needs to be made when about ten percent of the buds have broken, and it should be repeated every seven to ten days for two more times. If cold days persist, a fourth application may be needed. Please make sure to read and follow label directions carefully to protect the environment and people from chemical exposure.

So, how can you tell if your spruce tree has Weir's cushion rust or the more common spruce needle rust that requires an alternate host? Field diagnosis can be made by examining the age of the needles that exhibit pustules and the timing of pustule formation and needle drop off. With Weir's cushion rust, though some may appear by the fall of the same year, pustules are most commonly produced on one-year needles in spring, starting just before bud break. Thus infected needles are retained over one year after infection. With the spruce needle rust that requires an alternate host, pustules and orange spores are commonly seen on current-year needles in summer and fall and infected needles usually drop off by fall of the same year. For more information about Weir's cushion rust, please go to the UW–Extension website at www.uwex.edu/ces/wihort/gardenfacts/X1119.pdf.

Coming Events:

Third Thursday of each month, noon–1:00PM **–** ***Tree Talk: Live Online Brown Bag Lunch Series***. Visit http://actrees.org/site/stories/act_webcast_series.php.

June 18, 2009, 1:00–2:00PM **EST –** ***Urban Landscaping Part I: Bareroot Trees*** **webinar**. Visit http://actrees.org/site/stories/urban_landscaping_part_i_bareroot_trees.php.

July 16, 2009, 1:00–2:00PM **EST –** ***Urban Landscaping Part II: Tree Stock*** **webinar**. Visit http://actrees.org/site/stories/urban_landscaping_part_ii_tree_stock.php.

Urban Forest Insect Pests:

Japanese Beetles

by Linda Williams, Forest Health Specialist
DNR Northeast Region

Japanese beetle (*Popillia japonica*), an exotic invasive insect, continues to advance northward in its march across Wisconsin. As it goes it feeds on over 400 different species of herbaceous plants, shrubs and trees. Both the adults and the larvae can cause significant damage. The adults, which first appear in late spring or early summer, are skeletonizers, eating the leaf material between the veins. They will also feed on flowers and assorted fruits. Adults are about ½-inch long and have a shiny, metallic-green body and bronze-colored outer wings. The beetle has six small tufts of white hair along the sides and back of its body under the edges of its wings. The larva, a white grub, lives underground and feeds on the roots of trees, shrubs, and ornamental and turf grasses. There is only one generation per year but that's usually more than enough to cause noticeable defoliation.

There are a variety of control options for homeowners that will limit the populations of this pest.

1. **Avoidance**. Avoid planting tree and shrub species that are attractive to adult beetles near turf areas where the larvae would flourish. Trees and shrubs preferred by Japanese beetles include Japanese and Norway maple, birch, pin oak, horsechestnut, rose-of-Sharon, sycamore, ornamental apple, plum, cherry, rose, mountainash, willow, linden, elm and Virginia creeper. Trees and shrubs rarely attacked include red and silver maple, holly, boxwood, euonymus, flowering dogwood, cedar, juniper, arborvitae, red oak, tuliptree, magnolia, red mulberry, forsythia, ash, privet, lilac, spruce, hydrangea and yew (*Taxus* ssp.).
2. **Milky Spore Disease**. The bacterial milky diseases, *Bacillus popilliae* Dutky and *B. lentimorbus* Dutky, have been quite effective at controlling grubs in certain areas of the eastern United States. The spore count must build up for two to three years to be very effective. During this time you should not use an insecticide against grubs because the grubs are needed to complete the bacterium cycle and build up the spore count in the soil. The more grubs dying from milky spore disease, the more spores in the soil, the more grubs that will die in the future!
3. **Cultural**. Since the eggs and young grubs are very susceptible to dry soils, do not water your lawn during the time the eggs and first-instar larvae are developing, usually late August and September. The eggs and young grubs will wither and die as long as Mother Nature doesn't conspire against us and give us a nice soaking rain.
4. **Trapping**. Several traps have been developed to capture the adults and are commonly available at lawn-and-garden stores. Hanging traps may actually contribute to increased defoliation of plants near the trap so don't hang them near a tree unless you want that tree defoliated.
5. **Insecticides**. For insecticide recommendations see UW–Extension Garden Fact Sheet X1062 at http://wihort.uwex.edu/gardenfacts/X1062.pdf. Depending on which product you choose, it may need to be applied early (mid to late June) or later (mid August).

Photo: Dave Cappaert, Michigan State University

Adult Japanese beetle

Keep in mind that there is no quick fix. Getting rid of Japanese beetles one year may seem like a victory but they'll be back, so it's best to have a long-term plan in mind. Be sure to monitor your population each year to determine if control is necessary for that particular year; there's no sense in wasting your money to treat when no treatment is necessary. It's a good idea to talk to your neighbors as well and find out what they're doing to control Japanese beetle. By using a combination of the above control methods and not relying on just one, you will have more success in controlling this invasive pest.

July 24–29, 2009 – *International Society of Arboriculture Annual Conference and Trade Show "Sailing Into the Future,"* Providence, Rhode Island. Visit www.isa-arbor.com/calendar/Calendar.aspx.

November 3–6, 2009 – *Wisconsin Parks and Recreation Association Annual Conference and Trade Show*, Kalahari Resort and Convention Center, Wisconsin Dells, Wisconsin. Visit www.wpraweb.org/.

Nov 5-7, 2009 – *TCIA Expo*, Baltimore, Maryland, Tree Care Industry Association. Visit www.treecareindustry.org/index.aspx.

If there is a meeting, conference, workshop or other event you would like listed here, please contact Cindy Casey. Please see back cover for contact information.

Lifetime Achievement Award—Cliff Englert

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by Mary Ann Buenzow and Mary Kay Thompson
Janesville Shade Tree Advisory Committee

Editor's note: *The Wisconsin Urban Forestry Council has introduced a new award category to their recognition program—lifetime achievement. The Lifetime Achievement Award recognizes outstanding contributions to urban forestry in Wisconsin demonstrated throughout a lifetime career. They are pleased to announce that Cliff Englert, formerly of Janesville, is the inaugural award winner of the Lifetime Achievement Award.*

Photo: JSTAC

Cliff Englert in his element.

In January the City of Janesville lost one of its unsung heroes. After 20 years as park supervisor, Cliff Englert retired, leaving our city richer because of his selfless work and generous nature, and poorer because of his departure. He has given freely of his time, on and off the job. His work for the city has impacted countless residents as has his volunteer work with the Janesville Shade Tree Advisory Committee.

Born in Chicago, one of three sons of Andrew and Julia Englert, Cliff received his bachelor's degree in Forestry Resource Management from Southern Illinois University in 1976, and in 1985, his master's degree in Public Administration from the University of Wisconsin Oshkosh. While at SIU he met and married Beatrize DeSilva. They have two children, Andrea and Neal.

He began his career in environmentalism as a research assistant for the SIU forestry department and by planting trees for a US Forest Service strip mine reclamation project. For a time he did landscape and building maintenance for a large mobile home park. In about 1988 he accepted a job with the City of Janesville as a parks department laborer, then lead man. Ten years later he became park supervisor.

In 1997 Janesville began discussions with Wisconsin Power and Light (now Alliant Energy) about the need to prune trees interfering with power lines. WP&L insisted that there be adequate clearance between trees and power lines and the city agreed. The subsequent pruning proved so drastic that Cliff and professional arborists around the city began receiving complaints from residents. In response, the Janesville Shade Tree Advisory Committee was formed.

"Leisure Services coordinated the organization of the first meetings inviting professional arborists and concerned citizens," Cliff said. "I would say concerned citizens were the impetus for the original meeting."

The first meetings included professional arborists Chris Ranum and Dave Graham, professional nurserymen Dave Wanninger and Doug Squire as well as Cliff and Rock County DNR Forester Mary Ann Buenzow. All are still members of JSTAC as are many wonderful Janesville residents who have joined over the years.

"In our discussions we got to the point where we felt that a standing group of professionals and citizens would have the best chance of improving pruning and planting practices," Cliff explained.

Organizing the group into a cohesive unit took about a year and a half. Bylaws were written. A regular meeting date and time were set. Inspired by its mission "to promote and enhance the beauty and general welfare of Janesville's urban forest," JSTAC members began planning projects.

"By the fall of 1997 we were gelling into a committee format," Cliff said. "That was the first year we participated in Harvest Fest (presented by Rotary Botanical Gardens) and had a silent auction to raise some funds and later planted trees for auction winners."

In January of 1998 JSTAC chose the Community Foundation of Southern Wisconsin as a partner to help the group achieve not-for-profit status and realize its financial goals through donations and grants. Today CFSW administers all funds for JSTAC.

Since its inception Cliff has been the engine that has driven this dynamic group, serving as secretary/treasurer until this year when he was elected chair. JSTAC has flourished under his watchful eye, providing educational information to children and adults, and planting hundreds of trees. In cooperation with the city, JSTAC runs the Memorial Tree Program. JSTAC celebrates each Arbor Day with a tree planting project. At Cliff's suggestion the group solicited official city recognition of Arbor Day. He was instrumental in planning JSTAC's "right tree in the right place" demonstration project on Kellogg Avenue funded by a grant from the Alliant Foundation. JSTAC volunteers planted and still maintain those trees. Cliff's most ambitious suggestion was that JSTAC complete a street tree inventory. In 2007 JSTAC (and other) volunteers walked miles of city streets counting and assessing trees to help the city determine the continuing needs of Janesville's urban forest. Cliff was personally responsible for gathering the documentation needed to apply to the Arbor Day Foundation for Tree City USA recognition, an award achieved beginning in 2004 and every year since.

Cliff's legacy to JSTAC and to the community at large is his tireless dedication to the urban forest and its role in the lives of every Janesville resident. Upon retirement Cliff and Bea will leave Janesville for the land of bikinis and flamingos. He will be sorely missed. Not even a 200-year-old bur oak can fill the hole that will be left when Cliff leaves Janesville!

Wisconsin Urban Forestry Council Awards

by Laura Wyatt, Urban Forestry Council Liaison
DNR Division of Forestry

The Wisconsin Urban Forestry Council is pleased to announce recipients of the 2008 Urban Forestry Awards given in recognition of outstanding efforts of individuals, organizations and communities that further urban forestry in Wisconsin. Each award winner will receive a recognition plaque and a tree to plant in their community. Individual award presentations will occur in the community of the recipient at an event of their choice. Special thanks to McKay Nursery Company, Silver Creek Nurseries and Beaver Creek Nursery for donating trees.

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Lifetime Achievement—Cliff Englert

…recognizing career achievements that "planted the seed" for Janesville's urban forestry legacy by creating, developing and nurturing Janesville Shade Tree Advisory Committee which will continue to guide and sustain Janesville's community forestry program. See featured profile on page 10.

Photo: Courtesy of JSTAC

Cliff Englert (left) and members of Janesville Shade Tree Advisory Committee (JSTAC) get to work planting trees during Arbor Day 2007 activities.

Distinguished Service—LaVerne Peterson

…for sustained leadership in working with members of the Village of Amherst community to establish and maintain a community forestry program that preserves and advances forestry throughout the community.

Photo: Courtesy of LaVerne Peterson

LaVerne Peterson (third from right) joins Amherst Village Tree Board members and others in planting a memorial tree on Arbor Day 1998.

Project Partnership—Short, Elliott, Hendrickson, Inc., City of Superior & Superior Tree Board

…recognizing the merged efforts of a municipality, community volunteers and a private contractor to increase tree canopy while redesigning and reconstructing a major transportation corridor.

Photo: Meredith Kimberlin, City of Superior

Mayor Dave Ross of Superior (left) and WDNR Secretary Matt Frank (center) thank representatives of SEH, Inc., for their generous gift of 52 street trees to the City of Superior.

Innovations in Urban Forestry—Urban Brownfield Phytoremediation: City of Menasha, Winnebago County, OMNNI Associates, Environmental Forestry Consultants, LLC

…for the innovative use of trees to assist in the cleanup of contaminated soil and groundwater at a brownfield property in the city of Menasha.

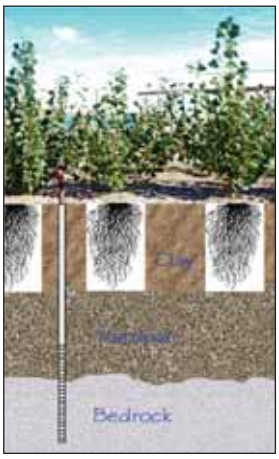


Photo: OMNNI Associates

Trees are part of the environmental restoration at a former brownfields site in the city of Menasha. A soil clay layer contaminated with a number of industrial and petroleum chemicals is being treated by a combination of poplars, cottonwoods and aspen trees.

Photo: OMNNI Associates

Jason Weis, an engineer working on the project, collects data on the 300 trees planted across the site. Characteristics from each tree are entered into a field recorder, which is then downloaded into a database and mapped into a geographic information system (GIS).

Consider who you can nominate for an award! For information on the 2009 awards process visit the Wisconsin Urban Forestry Council website at http://dnr.wi.gov/forestry/UF/council/.

Wisconsin's Street Trees, continued from page 1

Overall, the condition of Wisconsin's street trees is good to excellent. Average crown dieback is about 2.5% where anything less than 25% dieback indicates good health. Average crown density is 73%, where densities above 30% indicate good health. While 84% of all live trees had no visible damage, the damage noted on the remaining 16% was primarily cracks and seams, open wounds and conks. Norway, red and sugar maple had the highest incidence of damage observed, though the reason is unknown and deserves further study.

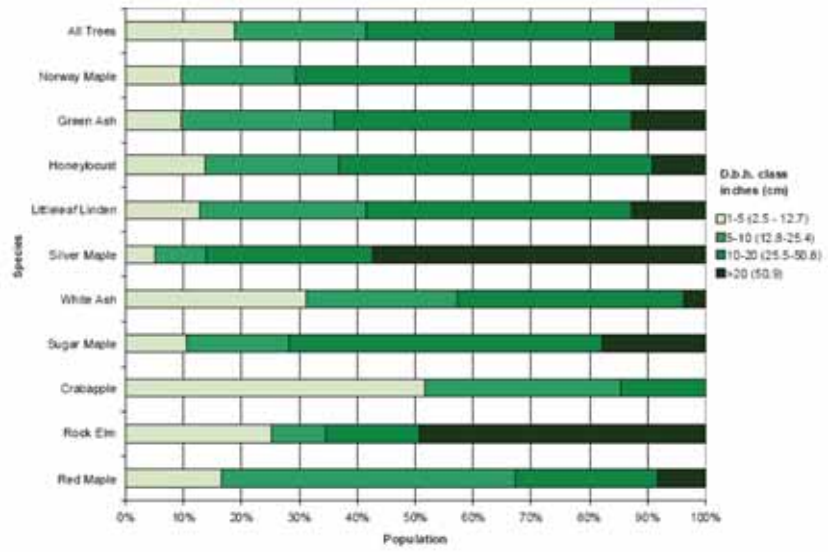


Figure 1. Diameter distribution within the 10 most common street tree species.

Benefits Provided by Wisconsin's Street Trees

The data collected by this study were analyzed using the Forest Service's Urban Forestry Effects model which quantifies some of the value and benefits of our street trees. Table 2 shows these values. While the benefits of carbon storage and pollution removal are important, communities and their elected officials will be most directly affected by the replacement cost estimated at close to $2 billion! Note that the UFORE model uses baseline costs and values that are as much as 15 years old, so if inflation were considered, these numbers would be significantly higher.

Benefit	Value	Extent
Structural / replacement costs	$1,771,000,000	1,018,000 street trees
Carbon storage	$7,300,000	325,000 metric tons
Carbon sequestration	$200,000	9,500 tons/year
Pollution removal	$1,700,000	300 tons/year

Table 2. Value and extent of Wisconsin's street trees.

Issues of Concern for Communities

Biodiversity

The most serious issue identified by this study is the lack of diversity in our street tree population and the threat that poses to its stability, that is, a population's ability to resist significant decline in numbers that would disrupt its value. The stability of a street tree population is determined by a number of factors such as species richness, species evenness, species adaptability, tree condition and age distribution. The bad news is that 64% of all Wisconsin street trees are either maple (44%) or ash (20%). This has put our state at high risk from emerald ash borer, which is already here, and Asian longhorned beetle which is believed to be eradicated from Illinois, but is wreaking havoc on maples in Massachusetts, New York and New Jersey. The replacement cost that communities could face is over $1.5 billion!

The good news is that the trees we have are in generally good condition (for now), we have reasonable size distribution and there are 88 species of trees in 35 genera that we could be planting and we have space to plant them. Not all those species are adaptable or appropriate to plant on streets, but knowing what we know now, a concerted effort should be undertaken by everyone to diversify our street trees.

Aging Tree Population

With the average street tree diameter approaching 13 inches, managers will be contending with many mature trees in the next decade or two. This has both pros and cons. On the positive side, larger trees provide greater economic, social and environmental services and they tend to require less regular maintenance. On the negative side, when maintenance is required, highly trained arborists are needed, and removal is more expensive. While overall tree health is good, the cracks, wounds and conks that were noted are structural defects of serious concern. Unmaintained large trees, particularly ones with defects, can suffer more storm damage and cause more property damage when they fail.

Need for Local Inventories and Plans

Despite the fact that this study established nearly 900 widely distributed plots statewide, it is still just an average view of the resource. You can find more details on the statewide studies in the full reports at the links below, but the only way to know what specific issues, benefits and threats your community faces is by doing an inventory and assessment of your street trees or your entire urban forest. We know from experience that communities in Wisconsin vary widely in what trees they have, what condition the trees are in, what threats they face and what benefits communities could reap with customized management. Contact your DNR regional urban forestry coordinator (see p. 16) for assistance in doing your own inventory.

The full street tree report is available on-line at:

http://na.fs.fed.us/pubs/fhm/street_trees/wi_street_tree_assessment_hr.pdf

The full urban forest report is available on-line at:

http://dnr.wi.gov/forestry/UF/council/pdf/2007ReportReference2.pdf

Urban Forestry Grant Awards Announced

by Candice Sovinski, Urban Forestry Grant Manager
DNR Division of Forestry

The DNR Urban Forestry Grant Program awarded $458,479 to 41 Wisconsin communities and nonprofit organizations for community urban forestry projects. The grant funding will support tree inventory and assessments, management plans, emerald ash borer preparedness plans, urban forest restoration projects, staff training, public education and other urban forestry efforts. For 2009, a new, simplified, startup grant was available to communities that plan to start or restart an urban forestry program. Startup grant projects are limited to a few project types and eight communities received funding this year.

DNR staff and program partners encouraged communities to apply for grants to bolster their preparedness for emerald ash borer. Wisconsin has approximately 5.2 million ash trees in its cities, villages and urban towns, and all are at risk since EAB was confirmed in Wisconsin last year. The grant awards will assist 23 more communities that plan to conduct an inventory of tree resources or develop an EAB preparedness plan, which are critical to early planning efforts and forecasting budgets for labor, equipment, staff training and restoration.

Grants can range from $1000 to $25,000 and grant recipients must match each grant dollar for dollar. Further information about the urban forestry grant program is available on the DNR urban forestry website at: http://dnr.wi.gov/forestry/UF/grants/ .

2009 WDNR Urban Forestry Grant Award recipients:

Aldo Leopold Nature Center (nonprofit) $14,184
EAB education

City of Ashland $9240
Ash inventory, EAB preparedness, tree planting

Village of Belleville $20,425
Belleville Beautification Project

Village of Bellevue $13,234
Tree ordinance, inventory, plan and planting

Village of Cambria $9763
Education, training, maintenance

Village of Clinton $10,675
Urban forestry project

Friends of Troy Gardens $25,000
Urban forestry partnerships, public involvement

Dudgeon–Monroe Neighborhood Association $4394
Glenwood children's park strategic urban forestry plan

Town of Dunn $25,000
Town-wide urban forestry plan

City of Eau Claire $6646
Management plan

City of Fitchburg $14,393
Tree inventory, education, EAB readiness & tree planting

Village of Fox Point $11,000
GIS mapping, tree planting, EAB education

Friends of Wehr Nature Center $16,000
In Celebration of Trees

Village of Friendship $13,246
Tree maintenance, planting, and removal

City of Greenfield $7800
Tree canopy & CITYgreen analysis

City of Green Lake $11,742
Developing Green Lake's urban forest

City of Horicon $9548
State tree & park tree inventory

City of Hudson $4000
Urban forestry program

Village of Johnson Creek $13,000
Urban reforestation – Phase II

Keep Greater Milwaukee Beautiful $24,920
EAB outreach, workshop and promotion

City of Kewaunee $5000
Tree planting

Town of Lisbon $18,368
Inventory, GPS mapping, EAB plan, education

City of Mequon $16,000
EAB management – GIS

City of Merrill $3500
Tree inventory, EAB plan

City of Middleton $3500
EAB management plan

City of Milwaukee $25,000
Hyperspectral Imagery & EAB Detection

Milwaukee County Parks $17,271
EAB plan

City of Oconto $5364
Street tree planting plan

City of Onalaska $13,300
Tree inventory and tree planting

City of Osseo $2411
Tree inventory

City of Princeton $5000
EAB education

City of Rhinelander $3250
Tree inventory

Village of Roberts $1500
Management plan

City of St. Francis Engineering $15,545
Inventory & training

City of Seymour $5000
Seymour greenway

City of Sheboygan Falls $5000
Implement management plan

City of Stevens Point $7866
Management plan & EAB plan

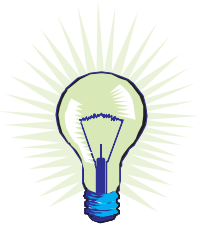
City of Superior $11,299
Inventory update

Village of Waunakee $15,213
Tree inventory

City of West Bend $7000
Management plan

Village of Whiting $7851
Inventory, invasives & education

For more information visit: http://dnr.wi.gov/forestry/UF/grants/, *or contact Candice Sovinski, 608-267-3775,* candice.sovinski@wisconsin.gov.



Does your community or organization have an idea, project or information that may be beneficial to others? Please let your regional urban forestry coordinator know. We will print as many of these as we can. If you see ideas you like here, give the contact person a call. They may be able to help you in your urban forestry efforts.

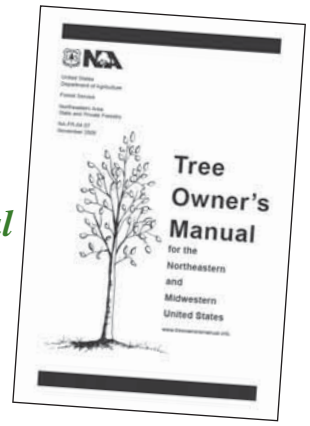
The Idea Exchange…

compiled by Olivia Witthun, Urban Forestry Assistant DNR Northeast Region

Trash to Trees

Gillette, Wyoming's Trash to Trees Program rewards cleanup volunteers by giving them free trees. The day-long community cleanup event is sponsored by the city, the county chamber of commerce and many corporate entities. The community donates the trees, labor and equipment. The others donate prizes, incentives, extra trees and marketing for the event. Individuals, schools, civic groups and other organizations all work diligently to pick up trash throughout the community and bring it to a common collection site. The number of trees each volunteer receives is based on the amount of trash they collect. Prizes are awarded to the school and individual who collect the most. Last year 2790 bags of trash were collected from all over Gillette. This is a win–win program. The community gets cleaned up and becomes even greener as more trees are planted by its residents. *Info:* www.gillettenewsrecord.com/articles/2009/02/23/news/friday/news07.txt .

Tree Owner's Manual



Many of our urban trees die prematurely. Countless numbers are planted too deeply and many do not receive regular maintenance. Worse yet, some are maintained improperly resulting in more harm than good. To help address these issues, the US Forest Service has developed a publication titled the *Tree Owner's Manual*. The format mimics that of an automobile or appliance manual. It includes a parts list, instructions for installation, tips for troubleshooting common issues, recommended service, and more. As a small, black-and-white booklet, the *Tree Owner's Manual* is inexpensive to reproduce so that it can be made widely available to garden centers, nurseries, landscapers and arborists to hand out to customers. And like other owner's manuals, hopefully it will be kept in a familiar spot and used as a reference over the course of the tree's life. *Info:* http://na.fs.fed.us/urban/treeownersmanual/index.shtm .

Continued on page 15

City of Beaver Dam, continued from page 2

A successful grant proposal was developed by the park & recreation department in 2002 for funding assistance from the DNR. This Urban Forestry Grant project established an inventory and management plan for park trees and built a nursery to offset the cost of replacement trees. Inventory records of the 350 acres of parkland identified 1300 trees of various species, sizes and condition, including registered champions. Following this successful project, forestry duties were consolidated in the parks & recreation department.

Donations from the community and volunteer assistance have provided substantial support for the city right-of-ways and parks. In 2005 the Parks, Recreation & Forestry Department and the DNR Urban Forestry Grant team worked with the Beaver Dam Rotary Club on their centennial project. Countless volunteer hours provided the labor to plant two hundred new trees along streets, in parks, and at public and private schools within the city. Educational sessions provided instruction on proper planting and care of our trees. This project qualified the City of Beaver Dam for its first Growth Award from the Arbor Day Foundation.

Placement of new trees is critical to future success. Citizen concern over an ordinance that prohibited tree planting in terraces less than six feet wide resulted in a 2006 decision to address narrow border policy. This review resulted in a change that now encourages planting in borders of not less than four feet, increasing the value of property and enhancing the appearance of neighborhoods. New, genetically designed smaller species of trees are approved by the department before planting, eliminating problems with trimming and associated costs.

The most recent community support was provided by the Wal-Mart Distribution Center, Transportation Division. In 2008 the city qualified for its second Tree City USA Growth Award in recognition of this partnership. Volunteer labor and funding to replace stock and plant new trees in the nursery will be a continuing project for this group.

The City of Beaver Dam loves its trees and the parks & forestry department is committed to the preservation, maintenance and future development of the forest within our community so that residents and visitors alike will be able to enjoy this resource for years to come.

Urban & Community Forestry Program Resources:

Grant Funding Sources—pt.1

compiled by Cindy Casey, Urban Forestry Coordinator DNR West Central Region

Aside from DNR Urban Forestry Grants, a few potential sources of grant assistance exist for municipal forestry projects in Wisconsin. Most of these programs are national or regional in scope and have very specific funding criteria. None are intended to replace local funds for ongoing or routine forestry efforts. Here's a partial list. (See also pt. 2 in the next issue of this newsletter):

Acorn Foundation – funds projects by nonprofits to support biological diversity & wildlife habitat, prevent/remedy pollution or advocate for environmental justice in underserved communities; see www.commoncounsel.org/Acorn%20Foundation.

Acres for America – grants provided via a partnership between National Fish & Wildlife Foundation and Wal-Mart Stores, Inc. for acquisition of real property to conserve fish, wildlife and plant habitat; program goal is to offset the footprint of Wal-Mart's domestic facilities; see www.nfwf.org/Content/NavigationMenu/Grants/GrantPrograms/default.htm.

Agstar Fund for Rural America – education, environment, quality of life & technology grants for rural communities; see www.agstar.com/.

American Forests Global ReLeaf Grants – tree planting grants for ecosystem restoration; see www.americanforest.org/global_releaf/grants/.

Captain Planet Foundation – grants for hands-on environmental projects involving youth; see www.captainplanetfoundation.org/.

Economic Development Administration – assistance and support for public infrastructure construction/rehabilitation and economic recovery; see www.eda.gov/AboutEDA/Programs.xml.

Environmental Education Grants – funds projects that enhance the public's awareness, knowledge and skills to make informed decisions that affect environmental quality; see www.epa.gov/enviroed/grants.html.

Environmental Justice Grants – funding for community-based nonprofits to address environmental or public health issues; see www.epa.gov/compliance/environmentaljustice/grants/index.html.

Every effort has been made to ensure accurate, up-to-date information; however, no guarantee can be made about the accuracy of information provided.

What Damaged This Tree?

Photo: Jeff Roe, WDNR

Do you have pictures of tree damage others ought to know about? Send them to Kim Sebastian (address on page 16) and we'll print them here!

Answer: *Construction, one of the more common tree damage techniques! Construction practices can damage trees in many ways, including aboveground physical damage such as bark scuffing and branch breakage. But construction damage can also be hidden underground and include severing roots when making grade changes, trenching and soil compaction. By running equipment, storing materials and working underneath trees, it's possible to squeeze out air and water space in the soil that trees depend on for survival.*

Idea Exchange, continued from page 14

Green Streets—Cool Schools

A New Jersey Tree Foundation program called Green Streets–Cool Schools educates urban residents and students about the importance of urban forestry while creating lush green corridors and school grounds. The program is a partnership between the Tree Foundation, DuPont and the New Jersey State Parole Board. Parolees go through an interview process to be hired on as short-term employees of the New Jersey Tree Foundation's planting crew. These are transitional jobs for parolees that combine real work, skill development and support services helping them overcome future barriers to employment. The Green Streets–Cool Schools Program has planted 5251 trees and employed 24 parolees over the past three years. The program has been a huge success for both New Jersey's urban forests and for the parolees themselves. *Info:* www.newjerseytreefoundation.org/GreenCities.asp .

Wisconsin Urban & Community Forests
A Quarterly Newsletter of the Wisconsin Department of Natural Resources, Forestry Division

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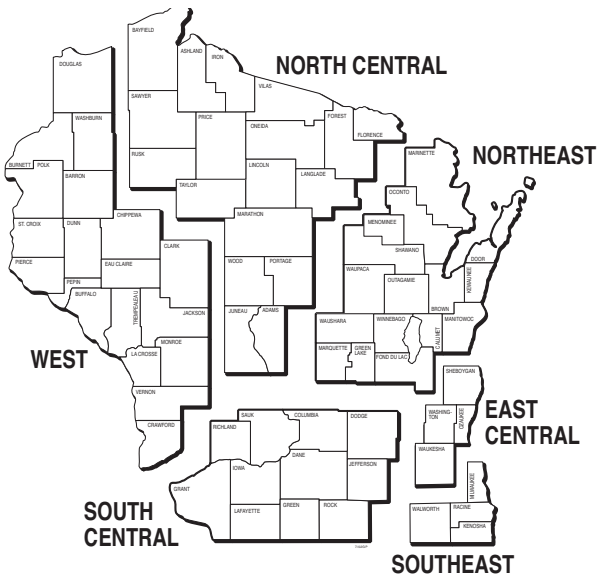
Wisconsin DNR Urban and Community Forestry Contacts



World Wide Web Site: http://dnr.wi.gov/forestry/uf/

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