



# The Dunesletter

A Publication of Woodland Dunes Nature Center and Preserve

## Make a Difference

Did you know American children spend an average of seven hours each day using entertainment media and technology? Research is providing a growing body of evidence that suggests a critical link between a person's well-being and nature.

Woodland Dunes plays an important role in providing high quality, affordable environmental education programs for the community. Our education programs provide hands-on learning opportunities with the goal of fostering environmentally literate citizens who make sustainable choices in their lives and community. They also provide a setting for thousands of children to "unplug" and engage in experiential, outdoor learning.

When you make a tax-deductible donation to Woodland Dunes, you are making a difference for the children in our community . . . and that is something you can feel good about.

**Jessica Johnsrud**

**Development and Marketing Coordinator**

Be our fan on Facebook.

## Spring 2011

Volume 143

Coming Events .....	2
Birds .....	3
WOW, Trails .....	4
Notes from Nature .....	5
The Walnut Tree and The Tomato .....	6
Living Classroom .....	8
Phenology .....	9
Rebirth of a Forest .....	10
Kidland Dunes .....	11
Citizen Scientists .....	12
Volunteers .....	13
Thank You .....	14
Ways of Giving .....	15

## Pulling Together

What's your vision of Woodland Dunes? Is it an island of lush, green forest, marsh, and meadow, teeming with every sort of wildlife, interacting in an incredibly complex ecosystem, thanks to our protection—or is it that of a family enjoying time together outdoors and learning about the world from a caring, knowledgeable interpreter? To the founders of Woodland Dunes, it was both in equal measure. That dual vision has guided the management of our organization since our founding in 1974. And it remains the vision of our organization's leaders today.

It took tremendous efforts to purchase one parcel after another until an amazing preserve could be knit together. That was an exciting time with tangible results. The people of Manitowoc, Two Rivers and beyond, along with foundations both private and public, rallied to save this treasure of local wildlife while it was still possible. Fortunately, they were in time to save many species of plants and animals that continue to prosper today. (Some, like the invasive species, are doing a little too well, but we're working on that.)

After that first visionary period, priorities shifted, but things didn't get any easier. In order to provide excellent education, you need excellent educators, both to teach visiting students and to teach other teachers. To allow people to enjoy the preserve, we have extensive trails, but to reduce our risk, we require liability insurance. To manage the preserve requires someone to oversee the work so that it is done appropriately and safely. To provide programs, we need facilities that must be maintained. To employ people requires increasing administration. Our small staff of two full and three part-time employees could never keep up with all that needs to be done without the help of our volunteers, who are, in a word, tremendous. But even a small staff, along with eight buildings, seven miles of trails, and thousands of visitors requires substantial funding. **The reality is that it takes more than \$500 per day to run Woodland Dunes.**

So although nature, both the study and teaching of it, is our greatest love, we can't escape the reality of fund raising to support this place. Our staff is busy looking for grant funding to support innovative programs in wildlife management and education. As a result, you will see an increase in our invasive plant control programs and exciting new education programs for all ages. Grants won't cover everything, so we need to appeal to you, our members and sponsors, to support our fund raising efforts as much as you are able, both through financial giving but also by giving your time. You can also help by participating in our exciting new fundraisers, including the Dash at the Dunes, a run/walk on our trails. In November, we are planning an expanded fund raising event that will feature all sorts of fun: auctions, games, and food. It's sure to be a big lift at a dark time of the year, and a great help to our programs. To do these fundraisers, we need a lot of help from volunteers, especially for the November event. We need to find sponsors and auction items and to organize activities. If you value what we have here and what we do, please contact us and help make these events a success.

Thanks to everyone for all you do for Woodland Dunes. Although there is always so much left to do, we should be proud of what we have done. I'm confident that we will continue to do so, undiminished, for a long time to come.

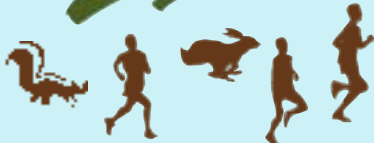
Oh, did I mention that we need your help?!

**Jim Knickelbine, Executive Director**

*For more ways to help Woodland Dunes, see page 15.*

# Coming Events

To confirm events and register for classes, please call Woodland Dunes, (920) 793-4007 or email [kellye@woodlanddunes.org](mailto:kellye@woodlanddunes.org)



## Dash at the Dunes 5K Trail Run/Walk April 9 • 10:00 a.m.

Registration: \$20 • After April 1: \$25

### Saturday, April 9 • Race Day

8:30 to 9:30 a.m.: Registration, packet pickup  
9:45 a.m. • bus from Dunes to start  
10:00 a.m. • race start, Orion Energy Systems  
Registration includes short sleeve *Dash at the Dunes* t-shirt (long sleeve shirt, \$5.00 more), registration packet, snacks, drinks, and prizes for the top finishers. Participants registering after April 1 cannot be guaranteed a t-shirt or registration packet.

The course is a flat, wooded and beautiful 5K trail run. It begins on the road at Orion Energy Systems and crosses Woodland Drive onto the Ice Age Trail. The trail leads you through forested ridges and swales, across small bridges and through a secluded meadow. The last 3/4 of a mile runs along Columbus Street, crosses Hawthorne Ave. and ends at Woodland Dunes Nature Center. Snacks and drinks will be provided to all runners/walkers. There will be food available for purchase by runners and their friends and family members. Awards ceremony follows.

Register online at  
[www.woodlanddunes.org](http://www.woodlanddunes.org)  
or call (920)793-4007.

*This event benefits our children's environmental education programs.*

## The Iditarod

### Adult Education Series

Thursday, March 3 • 1:00 p.m.

Experience the wonder and majesty of Alaska and the thrill of the Iditarod dog sled race with Mary Savage. Mary spent a season working as a dog handler. Enjoy this 60 minute presentation which includes pictures of the dogs and breathtaking views of the landscapes and an interesting perspective from an outsider. Adult Education Series

## Maple Syrup 101

### Adult Education Series

Wednesday, March 9 • noon to 2:00 p.m.

Learn about the science behind maple syrup, then help us tap some maple trees. Complete your education about maple trees by tasting some pure Woodland Dunes maple syrup. Meet at the Field Station on Goodwin Road.

## Maple Moon

Saturday, March 19 • 5:00 to 7:30 p.m.

Members, \$5; Family, \$10 • Non-members, \$8; Family, \$15

Learn how maple syrup is made by tapping trees, collecting sap, and tasting the liquid gold that is maple syrup. Registration required: (920) 793-4007 or email [kellye@woodlanddunes.org](mailto:kellye@woodlanddunes.org). Held at the Field Station.

## East and West Twin River Sampling\*

Tuesday, March 22 • 10:00 a.m. to noon

See page 12 for this and other Citizen Scientist events.

## Bird Club Field Trip

Saturday, March 26 • 8:00 a.m.

Visit Collins and Killsnake Marshes to see waterfowl, cranes, snipe. Meet at Hwy. 42, JJ, I-43 Park and Ride.

## Five Buck Hootenanny

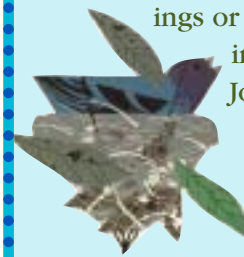
Saturday, April 2 • 7:00 p.m.

Admission: \$5 • under 12, \$2

Enjoy the traditional Celtic Irish music of Bug Eyed Pete. Doors open at 6:30 p.m. [woodlanddunesconcerts.org](http://woodlanddunesconcerts.org)

## Aegolius Bird Club

The Aegolius Bird Club meets at Woodland Dunes the second Tuesday of each month from September through May at 7:00 p.m. Field trips on Saturdays are taken to places rich in bird life. They are listed on these pages. Membership is open to anyone interested in birds, but you need not be a member to enjoy meetings or field trips. For information, call



John or Julie Woodcock at (920) 683-3878.

## Dash at the Dunes

April 9 (see sidebar left)

## Willow Basketry

Saturday, April 9 • noon to 6:00 p.m.

Members, \$40; Non-members, \$45

Learn the basics of stake and strand willow basketry. Create a finished basket to take home and cherish. Material selection, variations and embellishment techniques will be covered. Bring a sharp knife and scissors. Led by Sheboygan artist Little John. Held at the Field Station. Space is limited. Registration required: call 793-4007 or email [kellye@woodlanddunes.org](mailto:kellye@woodlanddunes.org).

## Pond Life

### Adult Education Series

Wednesday, April 13 • noon to 2:00 p.m.

Ponds are full of animal life this time of year. We will set live traps and see who is spending spring in the ponds. Aquatic critters have amazing physical and behavioral adaptations that are fun to see and learn about. Meet at the Field Station on Goodwin Road.

## Earth Day at Silver Lake College

Saturday, April 16 • 10:00 a.m. to 2:00 p.m.

For information on Earth Day or the drug disposal program taking place during Earth Day call 920-683-4333.

# Coming Events

To confirm events and register for classes, please call Woodland Dunes, (920) 793-4007 or email [kellye@woodlanddunes.org](mailto:kellye@woodlanddunes.org)

## Seven Generations

Thursday, April 28 • 6:00 to 9:00 p.m.

Native people from the Americas and beyond believe in the connectedness of all people, and the need to care for each other and nature. Join us for the 85-minute screening of *For the Next 7 Generations: 13 Indigenous Grandmothers Weaving a World that Works*. A Talking Circle will offer participants an opportunity to reflect, affirm and strengthen personal commitment to local and global healing, unity and world peace. Live music will be provided by local musician, Mike Retzinger. Light snacks will be served. Please call to register.

## Spring Bird Hike

Saturday, May 7 • 8:00 a.m.

Join naturalist Bernie Brouchoud on a leisurely walk through the preserve to look and listen for birds. Different habitats will be explored each hike. Registration required. No fee, but donations are appreciated. Meet at the Nature Center on Hwy. 310.

## Spring Nature Hike

Adult Education Series

Wednesday, May 11 • 9:30 to 11:30 a.m.

April showers bring May flowers. This is the best time of year to find spring ephemerals, and watch the forest awaken with a new season. Join Director Jim Knickelbine for this two mile stroll through the forest. Meet at the Nature Center on Hwy. 310.

## Bird Breakfast

Saturday, May 14 (see sidebar right)

## Spring Bird Hike

Saturday, May 14 • on-going at Bird Breakfast

Naturalist Bernie Brouchoud will lead a leisurely walk through the preserve to look and listen for birds. Take a break from the festivities at Bird Breakfast, and see the birds of spring with an expert to point them out. Meet at the Nature Center on Hwy. 310.

# Bird Breakfast and Migration Celebration

A day of fun and learning about birds

Saturday, May 14 • 8:00 to 11:00 a.m. ~ Adults, \$4.50; children, \$3.50; under six, free

Ham and  
pancake  
breakfast

kid's  
games



bird  
banding

guided  
bird hikes

## Bird Club Field Trip

Saturday, May 14 • 11:30 a.m.

Join us as we visit the LTC Old Growth Forest to see woodland songbirds. Meet at the Nature Center on Hwy. 310. (Bring bag lunch.)

## Spring Bird Hike

Saturday, May 21 • 6:00 a.m.

Follow naturalist Bernie Brouchoud on a leisurely walk through the preserve to look and listen for birds. Different habitats will be explored each hike. During this early morning walk, you'll discover a whole new world. Registration required. No fee, but donations are appreciated. Meet at the Nature Center on Hwy. 310.

## Frog Hike

Saturday, June 4 • 8:00 to 9:30 p.m.

Admission: \$3.00

Learn about the frogs that make their home at Woodland Dunes, then walk to the frog pond to listen and look for our new friends. Program takes place at the Nature Center on Hwy. 310.

## West Twin Pontoon Ride

Adult Education Series

Wednesday, June 8 • 9:30 to 11:30 a.m.

Enjoy a guided pontoon trip down the West Twin River. Sit and relax as you learn about the animals and plants that make the West Twin River their home. Space is limited; registration required. Call 793-4007 or email [kellye@woodlanddunes.org](mailto:kellye@woodlanddunes.org) to register.

## Annual Meeting

TBA

## Volunteer Appreciation Lunch

Tuesday, June 21 • noon

We hope all of our wonderful volunteers will join us for a luncheon honoring them and their many accomplishments.

## Little Wings Celebration

Thursday, June 30 • 10:00 a.m.

**\*See page 12 for Citizen-Scientist events and opportunities.**

For information, call (920) 793-4007 or check our website at [www.woodlanddunes.org](http://www.woodlanddunes.org).

Unless noted, all events are held at the Nature Center.



**bunchberry**

Although Woodland Dunes' seven trails are open year around, to me each has a prime season. I like Willow and Coneflower Trails in autumn, Conifer in winter, Cattail in summer. You will have your own preferences. But I think every-

one would agree, the Goodwin Road trails are a pure delight in spring. Each of the three—Black Cherry Trail at .8 mile, Trillium Trail at 1.5 miles and Yellow Birch Trail, a .3 mile boardwalk—can be walked separately or combined. Heavily shaded later in the year, in springtime these trails are illuminated by primrose yellow sunshine twinkling past a network of bare branches. Look down, and you will see spring flowers spangling the ground.

The trails pass through upland mixed hardwood forests and wooded swamps. They have been routed to follow ridges when possible, but with all the snow we've had this winter, parts of the trails may be a little wet or muddy. In many places, bridges cross these seasonally wet swales, but you should wear suitable footwear all the same.

This is a good place to find the wild flowers associated with the northern mixed hardwood forest and some of the flora of the boreal forest.

If you look beneath white pines, you may find Canada mayflower (*Maianthemum canadense*) with its heart-shaped leaves and spear of tiny white flowers. It's usually small, reaching eight inches at the most, and grows in groups. Get down on your knees, and you may be able to detect its sweet fragrance.

Bunchberry (*Cornus canadensis*) is different from many of our wildflowers in that it is a sub-shrub, not a herbaceous plant. As you can tell from its scientific name, it's a dogwood, just a very small one.

Blue bead lily (*Clintonia borealis*) is better known for the bright blue berries that give it its name, but in spring, it sports pale yellow flowers on a leafless stalk.

Starflower (*Trientalis borealis*) often grows near the base of northern white cedar, also known as arborvitae. Its leaves are held in whorls, and as you would guess, the flowers look like tiny white stars. Starflower has the unusual feature of

cont. on page 5



**nodding trillium**

## Bats Listed as a Threatened Species in Wisconsin

Four cave bat species in Wisconsin were recently listed via emergency rule as Threatened Species in Wisconsin. This listing includes the little brown bat, big brown bat, northern long-eared bat and Eastern pipistrelle. Over ninety percent of the bats received by Wildlife Of Wisconsin (WOW) are big brown bats.

The reason these species are listed as threatened was to allow the Wisconsin Department of Natural Resources (WDNR) time to monitor them more closely and make changes in response to a condition called white-nose syndrome. It was first discovered in bats on the east coast in 2006. The spread of the fungus is occurring much faster than anticipated and has now been identified 240 miles from the Wisconsin border, a distance the little brown bat is known to fly. This fungus is estimated to have claimed over a million hibernating bats in nine states.

WOW is one of a handful of rehabilitators throughout the state that will be applying for an Endangered and Threatened Species permit—provided we can comply with all the quarantine and disinfecting regulations. During a conference call with the WDNR, we learned that they may have recently discovered a way to treat the bats; however, more information is needed to determine if the treated bats are carriers of the disease and if they can still be released.

Environmental impacts could be serious. Bats are the primary predators of night-flying insects and eat large numbers of moths and beetles. Insect-eating bats are crucial to a healthy ecosystem. If large numbers of bats die, the natural balance could be thrown off for many years to come.

Please do not pick up bats with your bare hands. If you come across live or dead bats with white-nose syndrome (a white ring appears around the nose), contact WOW (information below), your local WDNR office or a nearby U.S. Fish and Wildlife Service office. Cavers are asked to continue to observe all cave closures and advisories, and to avoid caves containing large hibernating populations of bats.

To further help bats, plant moth-attracting wildflower gardens to give bats food to eat. Leave dead or dying trees in place to give them natural shelter. You can also build or buy a bat house to provide adequate roosting for bats in your area. Teach your friends and family about the importance of bats and either donate or contribute to any organization trying to help them.

Susan Theys, WOW

### Injured birds and animals or bats with white nose syndrome

If you find a live or dead bat with white-nose syndrome, or any injured or abandoned animal, please DO NOT bring it to Woodland Dunes. Instead, call WOW's pager number, 323-5609, and leave your name, telephone number and address. They will return your call, most likely within 15 minutes, and either come to pick the animal up, or instruct you what to do.

# Notes from Nature

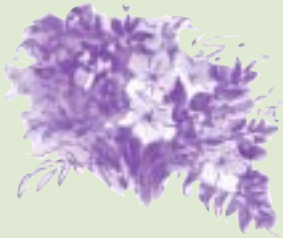
## Spring Kingdom

I'm heading for an unwalked place  
where spring's not spoken of,  
where border gardens  
and farm orchards cease.

There I'll get on my knees  
to uncover avatar kingdoms  
blooming in miniature  
underneath dried prairie grass.

The wild buds of that place  
stake out their own air,  
their own strong light,  
and their rain.

I'm headed where spring  
wants new words, or better,  
no words at all,  
where streams and fields  
aren't spoken for yet,  
and where what belongs  
still grows free.



Jean Biegun

cont. from page 4

being based on sevens: seven leaves,  
seven petals, and seven sepals.

And of course, you should look  
for nodding trilliums (*Trillium cernuum*).  
Smaller and shyer than the familiar  
large trillium (*Trillium grandiflorum*),  
they are worth seeking out.

Take your wildflower guide book  
along on your walk to identify as  
many of these dainty beauties as you  
can. And keep an eye out for other  
interesting plants, like the clubmosses  
that are abundant here and partridge-  
berry, a tiny creeping plant with  
round, white-veined leaves.

Please do not pick any flowers,  
instead use your camera or sketch-  
book to record your finds.

Susan Knorr, Editor

## Precursors of Spring

About the time groundhogs are supposedly making their weather predictions, the earliest returning bird migrants are bringing the promise of the coming spring. Stimulated by the lengthening days in late January and early February, horned larks start northward. By early March, the population that arrived first has moved on northward and has been replaced by others, some of which will remain to nest.

The horned lark (*Eremophila alpestris*) is found, at one season or another, through most of North America. It also occurs in Europe and Asia. It breeds in the northern regions and winters south to northern South America, northern Africa, and southern Asia. In Great Britain its name is shore lark.

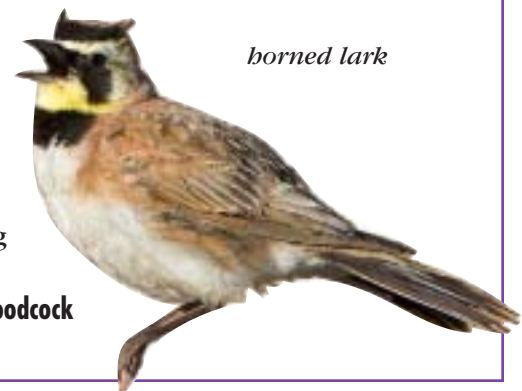
Horned larks resemble sparrows, but their bills are thin and their backs do not have streaks. They have a black band across their chest, black eyebrows and "sideburns," and yellow and white face patterns. In males the eyebrows are extended into raised feather tufts that give the birds their name. Females and young have duller markings and lack the "horns." All horned larks have mostly black tails. The two central tail feathers are brown, and the two outer feathers are edged with white. Horned larks are not famous songsters like their European relative, the skylark. Their song consists of a series of high-pitched tinkling notes. The birds often sing in flight.

Across its broad range, the horned lark is separated into populations that differ slightly in the shade of brown on the back and the amount of yellow in the face pattern. The population that breeds in our area has a medium brown back and very little yellow in the face.

Horned larks are birds of open country. They are found in prairies, fields, golf courses, airports, shores, and tundra. They have benefited greatly by the clearing of the forests. They eat insects and other invertebrates, and the seeds of grasses and other plants. On the ground, they do not hop like sparrows, but walk. Their flight is undulating.

In our area, horned larks may begin nesting by late March. The nest is built of grasses and other plant material in a shallow depression in open ground. They lay two to five (usually three or four) brown-speckled grayish or greenish eggs, which hatch after eleven or twelve days. The young fledge in another nine to twelve days. They raise two broods each year, or sometimes three. Early nests are sometimes destroyed by late snowstorms.

Because they are out in the open fields, we may be unaware that horned larks are here in summer, unless we hear their high tinkling songs. On their wintering ground, horned larks gather into large flocks. A few birds may remain through the winter in more northern areas, sometimes mixed in flocks of snow buntings or longspurs. In migration, they occur in small flocks, often on roadsides where the snow has been removed, reminding us that spring will soon be here.



horned lark

John Woodcock

# The Walnut Tree and the Tomato Plants: Lessons from the Garden

We learn many lessons from our parents, not all of them when we are children. My dad grew most of the garden treats we had for dinner and Mom spent the summer canning the produce for the rest of the year. Each of the three sons in our family was expected to help with the garden, spending much of our spare time tending the plants. As one by one we left home, the garden shrank, finally occupying only a small plot.

When I visited in the 1960s, Dad complained that he was no longer able to grow tomato plants, blaming the neighbors' walnut tree for the failure. Being a physiologist interested in sensory systems in animals, I didn't think he was right. In an attempt to be helpful, I suggested the fertilizers he was using were inappropriate, or that the neighbor was up to some mischief. I was sure that something other than the walnut tree was responsible for this problem, although in the back of my mind I remembered that marigolds deterred some bugs. Yet the idea that plants kept other plants from growing seemed too much of a stretch. The answer to Dad's problem didn't come to me for years.

Plants are enormously complex beings with many stories to tell. For most of us, plants provide food and beauty—or they cause discomfort with nasty chemicals (poison ivy), sharp spines (cactus) or thorns (prickly ash). But the notion that plants would do these spiteful things to each other seemed far-fetched. Today, however, the literature is full of descriptions of allelopathy (plant-plant interactions), that, much to my chagrin, have been known since Biblical times. As early as 300 BC, Theophrastus, the father of botany, suggested that pigweed was deleterious to the growth of alfalfa.

In the 1800s, the Swiss French biologist Augustine Pyrame de Candolle noted that some plants made the soil inhospitable for other plants, and suggested that some plants were “at war with one another.”

Additional examples of allelopathy are still being discovered. The word itself comes from the Greek words, *allelon* for one another, and *pathy* for suffering or disease. Plants have the metabolic mechanisms to manufacture an incredible array of nasty chemicals, the allelochemicals. This war chest of chemicals that are used by plants on each other include the alkaloids that attack DNA, the phenolics that affect mitochondrial activity and function, various plant hormones that affect photosynthesis, and ion channel blockers and ATP inhibitors that affect the movement of ions and materials across cell membranes.

Further, chemicals often interact with each other, exaggerating the effect of a single allelochemical. This makes it difficult to identify the trick one plant is playing on the other plants. Plants play dirty pool by any standards, making our human disputes seem like child's play. (See Table 1)

As suggested by de Candolle, soil itself can be a target for these acts of war. The chemicals produced by plants can affect soil bacteria, using biological tricks that include disease and disruption of growth. Soil is made “sick” when allelochemicals released by warring plants block the activity of soil bacteria important to nitrogen fixation. When this happens, parts of the nitrogen cycle are disrupted and the soil can no longer support plants that require high nitrogen, especially the grasses. This is why pine needles and pine bark do not always make the best mulch—the tannins they release into the soil when they decompose interfere with the work of important soil microorganisms.

Unfortunately, the pine needles in our garden do little to interfere with the growth of bishop's weed (*Aegopodium podagraria*), which thrives under our white pine trees.

Not all allelochemicals are released into the soil from the root systems. Many are volatile substances that are released into air from openings in the leaves. These airborne chemicals behave like the pheromones (air borne hormones) used by many animals, including humans. Perhaps the story most remembered from biology is the use of sex attractants by insects, allowing widely separated males and females to find each other by following chemical trails. In plants, these chemicals are more likely to keep species apart than bring them together.

As competent gardeners know, this biological warfare has implications for locating gardens and situating plants. It isn't always easy to determine if a garden problem is the result of allelopathic interactions, or due to insects, nutrient deficiencies or excesses, plant diseases or toxins from run-off such as road salt. Even mischief by the neighbor cannot be excluded. (Someone—not the author—dumped a gallon of Roundup along his fence line because his neighbor's shrubs shaded his garden. Neither won anything in that battle. Nothing grew in that area for years—including the garden.)

Table 1

Allelopathic Species	Type of Chemical	Affected Species
<i>Trees</i>		
sugar maple	phenolics	yellow birch, white spruce
black walnut	juglone or quinoneor	Pines, apple, birch, black alder, linden, azalea and tomato
black cherry	cyanogenic glycosides	red maple, red pine
oaks	coumarins	herbs and grasses
sassafras, box elder	terpenoids	elm, silver maple
laurel	phenolics	black spruce
sumac	phenolics and terpenoids	Douglas fir, forsythia? Kentucky bluegrass?

Adapted from *Allelopathy: Rehab for Killer Plants* by Elmer Blessner



Sugar maple uses phenolics to discourage the growth of yellow birch and white spruce in its vicinity.



Becoming a good gardener means learning from experience: follow the rules of composting and soil preparation and avoid allelopathic problems. When you add another level of complexity—non-native plants and their allelopathic relationships—you learn that gardening is not for the faint of heart. (See Table II.)

Perhaps the greatest success in the garden occurs when plants and their allelochemicals are used as weed or insect killers. The garden can be colorful, fruitful and sustainable with little human interference.

A rite of autumn is the tradition of collecting leaves and stuffing them into enormous plastic bags before sending them to the landfill. I don't know where this practice started, but it would be a better practice to turn the leaves into compost with a mulching lawn mower. The decomposition of leaves releases chemical nutrients that protect the plants and provide for their growth in the spring.

Fall foliage provides more of these beneficial nutrients than does the summer growth, which suggests that the plants are providing for their own survival in other ways than warfare. They are not just shooting down their neighbors, but also providing support for their own growth and needs.

Plants at war with one another seems like science fiction, but just because plants don't move in the way animals do doesn't prevent them from protecting their turf. Plants are able to exert enormous influence over other plants with their terrible chemical arsenal, an arsenal that includes attractants, repellents, wound healers, growth promoters and inhibitors and some incredibly nasty toxins

### Before it's too late...

Not all of the allelochemicals are "wasted" on warring plants. Humans have benefited from these bioactive plant chemicals from the dawn of civilization. Today, an extract of the Madagascar rosy periwinkle is the most effective treatment for a form of childhood leukemia (*Catharanthus roseus vincristine*) and Hodgkin's disease (*Catharanthus roseus vinblastine*). However, the slash and burn agricultural practices used in Madagascar have reduced the native rain forest where this plant is found to less than 90% of the original area. This threatens the lives of many of Madagascar's biologically important plants—including the rosy periwinkle. But it isn't just in third world countries that poor agricultural or land use practices threaten the loss of plants like the rosy periwinkle. Thoughtless destruction of important ecosystems occurs throughout the world, causing great concern that many kinds of medicinal plants are being lost even before they are discovered. And it isn't just the medicinal plants that are being lost; many animals are faced with a similar fate.

Another plant that provides material for a drug is the wild yam (*Dioscorea villosa*), native to Central America. It provided the precursor for progesterone, a drug used in the manufacture of the first birth control pills in the 1960s. In addition, two of the most commonly used drugs today come from plant material; caffeine from the coffee bean, and aspirin from the bark of the willow tree (*Salix* spp.). In part, our fascination with these medicinal plants explains the geopolitical interests we have, in these seemingly uninteresting countries or regions of the world, where these plants are found.

Table II

Allelopathic Species	Chemical Type	Affected Species
goldenrod, aster	phenolics and terpenoids	red pine, sugar maple, black cherry
tulip poplar, New York fern	phenolics	black cherry
bracken fern	phenolics	Douglas fern
clubmoss	phenolics	black cherry
tall fescue	phenolics	black walnut, white ash, sweetgum,
red fescue, Kentucky bluegrass	?	azalea, barberry, forsythia, yew
colonial bentgrass, forsythia	?	azalea, barberry, yew
perennial rye	?	apple, forsythia, flowering dogwood
foxtail, smooth brome	?	<i>Populus</i> spp.

Adapted from *Allelopathy: Rehab for Killer Plants*, Elmer Blesner



Club moss, *Lycopodium obscurum*, uses phenolics to keep black cherry from growing in its vicinity.

that can kill just about anything. It should not surprise us that plants are able to fight battles just as animals—with the advantage of not needing to move from place to place. In fact, they are even more effective in their fights. A shouting match between two animals with adjoining territories is usually repeated many times, but a chemical that prevents the neighbor from living next door stops further quarrels dead.

I often think of the walnut tree-tomato relationship and wonder what the walnut tree gains by preventing the tomato from growing in its vicinity. Other plants co-exist with the walnut tree, seemingly little affected by each other's presence, or even benefiting from it. Maybe tomato plants attract unwelcome insects (juglone also has insecticidal properties) or extract nutrients or growth factors from the soil more efficiently than the walnut tree. Or perhaps another war is being fought that we know nothing about, involving other players with their own needs, and the tomato plant is just collateral damage in that war.

Plants live very complex lives that become more fascinating as we learn more about them. Their story is one of greed, gluttony and mischief; all qualities we once only attributed to human activities, including some of our Seven Deadly Sins. And, plants accomplish this without a nervous system or a mind—that we know of.

Chuck Sontag, Professor Emeritus, UW-Manitowoc



# The Living Classroom

## Spring Photo Nature Hunt Contest

Hike Woodland Dunes trails and look for these signs of spring. Photograph your findings. The first three groups to drop off or send in a completed spring nature hunt card with photos will receive fabulous prizes from our nature shop. The best photo will be featured in our Summer newsletter.

Name (s): \_\_\_\_\_

Phone Number or email: \_\_\_\_\_

### Skunk Cabbage

Date \_\_\_\_\_ Location (trail name) \_\_\_\_\_

Skunk cabbage is the first plant to flower in the spring at Woodland Dunes. You can find it emerging from wet, muddy areas. It has the ability to generate temperatures 15 to 35° above air temperature, allowing it to melt its way through frozen ground. The part we see in early spring is the flower; the stem of the plant is buried beneath the mud. Leaves will emerge later in spring. It does smell like a skunk, but only if broken.

### Wood Frog

Date \_\_\_\_\_ Location (trail name) \_\_\_\_\_

Wood frogs can be found in Woodland Dunes wet woodlands most of the year. In early spring they move to ponds to mate and lay eggs. This is one of the first frogs you will hear calling in spring. Their call sounds like ducks quacking.

### Garter Snake

Date \_\_\_\_\_ Location (trail name) \_\_\_\_\_

Garter snakes are slow moving in early spring as they emerge from winter hibernaculum (underground wintering areas). They are often found curled up in the sun along the trails. They are slow moving until warmed up, so they should be easy to find and photograph.

### Fern Fiddle Heads

Date \_\_\_\_\_ Location (trail name) \_\_\_\_\_

Emerging fern leaves resemble the curled design on the end of stringed instruments like fiddles (violins). Eighteen different species of ferns have been found at Woodland Dunes.

### Returning Migrant

Date \_\_\_\_\_ Location (trail name) \_\_\_\_\_

Look for a bird that has returned to Woodland Dunes for the spring. More than 110 species can be found on the preserve during the nesting season, some of them having flown thousands of miles to get here.

### Earthworm Castings

Date \_\_\_\_\_ Location (trail name) \_\_\_\_\_

During winter, worms in the frost layer hibernate while those that are in the deeper unfrozen portion of the soil remain active. Worm castings (worm poop) is a sign that the ground has thawed and spring is here. Castings contain high populations of beneficial microorganisms important for healthy root systems. Castings also naturally aerate the soil, help to retain moisture levels, and release nutrients slowly over time to meet plants' needs.

### Leaf-out on trees

Date \_\_\_\_\_ Location (trail name) \_\_\_\_\_

Find a tree whose leaves are at least the size of a quarter. Once leaves are out, trees can start making more food and flowers, and seeds are soon to follow.

### Your Own Spring Discovery

Date \_\_\_\_\_ Location (trail name) \_\_\_\_\_

Find something that is a sign of spring for you. \_\_\_\_\_

## Journey North Leaf-out Study

Adopt a flowering dogwood, quaking aspen or sugar maple. Visit your adopted tree on a regular basis. Sketch the buds on the same small branch each time you visit. Watch the bud open, the tree bloom, and the leaves emerge. Report to Journey North when your tree's leaves are the size of a U.S. quarter. Using Leaf-out data, Journey North maps spring's progress across the hemisphere.

Record your data and view data from across the continent at [www.learn-er.org/jnorth/tm/spring/AboutLeaf.html](http://www.learn-er.org/jnorth/tm/spring/AboutLeaf.html).

## The Snowball

Although frigid temperatures kept some home from this year's Snowball, those who did come had a great time. The crisp white snow made the woods unusually attractive. A beautiful candlelit trail and horse-drawn sleigh rides were highlights of the evening.

Congratulations to all who participated in the Snowshoe Run/Walk and our Snow Sculpture contest.

### Snowshoe Race/Run

*1st place winners:* David Bourgois, Johanna Worley, Katie Vandenhouten, Jody Henseler, Ashley Potter and Jeff Skonecki

*2nd place winners:* Dan Gray, Lori Potter, Andrew Henseler and Debbie Vandenhouten

*3rd place winners:* Deb Sieracki and Gail Markiewitz

### Snow Sculpture Contest

*1st place:* Emma Knickelbine and Andrew Henseler

*2nd place:* Matthew Ehmke-Zimmer







*Snowshoe racers didn't hold back in their eagerness to win.*









# What's Happening at Woodland Dunes


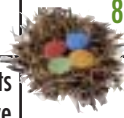


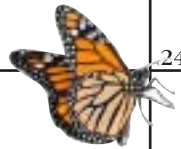


The dates given are based on data from previous years, but will vary depending on actual conditions.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			Canada geese return to marsh	American tree sparrows singing	Sap running	Sandhill cranes begin arriving
Robin's spring arrival 6	 Male redwing arriving. Hike Cattail Trail 7	1 Horned larks courtship song Visit the Prairie 8	2 <b>Maple Syrup Class</b> 9	3 Woodchucks come out of hibernation 10	4 Male goldfinch molting to breed 11	5 <b>Five Buck Hootenanny</b> 12
13	14 Turkey vultures arrive	15 First earthworm castings	16 Pussy willows are out	17 Moths active 18	18 Bluebirds arrive	19 <b>Maple Moon Hike</b> 20
20 Skunk cabbage on Yellow Birch Trail	21 Garter snakes emerging from hibernaculum	22 <b>River sampling class</b>	23 	24 Wood frog in forest	25 	26
27 Woodcock peenting	28 	29 Great Blue Heron visit Todd's Pond	30	31 Eastern phoebe returns		

March

					Tree swallows here	
3 Hooded merganser, visit prairie pond	4 	5 Harrier hawks visit prairie	6 Ospreys back. Hike Cattail Trail	7	8 	9 <b>Dash at the Dunes ~ Basket Class</b>
10 	11	12 Cormorants	13 <b>Pond Life Class</b>	14 Winter wren	15 American toad	16 Savannah sparrow returns
17 	18	19 Louisiana water thrush	20 	21 Marsh marigold in full bloom	22 Geese hatched on Todd's pond	23
24 Caspian tern calling	25 Ruby crowned kinglet	26 Brown thrasher	27 Painted lady butterfly	28 <b>Seven Generations</b>	29 Eastern towhee	30 Marsh wren

April

1	2	3 Red admirals in Butterfly Garden	4 Orioles appear 	5 Rose breasted grosbeak	6 	<b>Bird Hike 8:00 a.m.</b>
8 	10 Ruby throated hummingbirds	11 <b>Spring Nature Hike</b>	12	13 Little brown bats active 	14 <b>Bird Breakfast</b>	<b>Bird Hike 6:00 a.m.</b>
15	16 Indigo buntings show up	17	18	19	20	21
22	23 	24 Monarch butterflies	25 Painted turtles laying eggs	26 Snapping turtles mating in the pond 	27 Red osier dogwood in bloom	28 Hawthorn in bloom 
29	30	31				

May

# Rebirth of a Forest



It doesn't take much. The urge usually hits on the first unseasonably warm day in late winter. Out come the seed and nursery catalogues and in go orders for plants that tempt me by their intriguing names, origins or attributes. Common sense seldom comes in to play, although I've managed to leave the dizzyingly blue Himalayan poppy (*Meconopsis betonicifolia*) to gardeners who can meet its exacting requirements, and the dramatic, giant-leaved *Gunnera manicata* to those in a warmer climate. Yet each year, despite my best intentions, the plant junkie takes over.

But this year I'm resolved my plant dollars will be spent in restoring the woods at Winghaven to a semblance of their historical glory. The oldest photos I have show cleared fields and an orchard, but I want to turn the clock back to a time before eager entrepreneurs cut the trees and stripped their bark to fuel the tanneries of Milwaukee. What would I have seen here two hundred years ago?

When I started my research, I hoped our property would qualify for the Managed Forest Law (MFL)\* designation and a welcome property tax break, but we may not have quite enough land to meet the requirements—it's close. Instead we'll focus on making it a better place for wildlife, especially birds, by planting trees and shrubs.

It takes a lot of work to get the small plants we can afford to the stage where they take care of themselves: digging holes, discouraging deer, watering, removing weeds. I want to make sure every effort counts by choosing trees that will thrive in this soil and climate. Trees that grew here originally seem like a good bet. But what were they? Surely not the box elders and silver maple that dominate today.

I started my research by consulting *The Vegetation of Wisconsin, An Ordination of Plant Communities* by John T. Curtis. He states that in 1840, all of Manitowoc County was conifer-hardwood forest, specifically mesic northern forest. DNR records confirm that most of vegetation found here was sugar maple, basswood, and beech. Hemlock and white pine were locally important, with hemlock restricted to cool moist sites near Lake Michigan.

Narrowing down the search, I found early records of the Town of Two Creeks which stated, "The extensive growth of hemlock, useful for its bark and lumber, and the facilities for shipping, had been the cause for the Guido Pfister Leather Company of Milwaukee to establish their tannery in this locality." Those hemlocks, if not logged off by then, were certainly gone after October of 1871 (the year of the Chicago and Peshtigo fires), when "a fire covered a portion of the Township of Two Creeks, starting about four or five miles south of East Two Creeks and spread north. . . damage of timber was extensive." Any regrowth would have been lost when fire again struck in

1918, wiping out the village of Two Creeks, which covered the north half of our property. It seems clear that by 1920, no remnants of the original forest remained.

The list of trees that grew here in the past was a long one, but the list of those suitable for planting today isn't. I wish I could grow hemlock and yellow birch, but they are favorites of the numerous deer that roam freely from their protected home on nuclear plant property. Disease issues eliminate others: beech is troubled by a fungus disease spread by scale insects, elm can no longer be grown because of Dutch elm disease, and ash trees are subject to emerald ash borer, which is rapidly moving closer to us.

Deciding I needed to call in an expert. I asked the advice of Sue Crowley, the Manitowoc Country DNR forester. After evaluating the woods, she made some suggestions. Although I tend to think of the land as wooded, in reality, it is partially open with scrubby hawthorns, apples that have sprung up from seed and innumerable box elders in various stages of breaking up. Sue thought we could plant up to 900 trees per acre. She suggested red maple, white birch, hackberry and bur oak. We soon realized the land will need a great deal of work—removing invasive plants and clearing areas of downed trees and shrubs—before we can do much planting. So that will be our main focus this coming year.

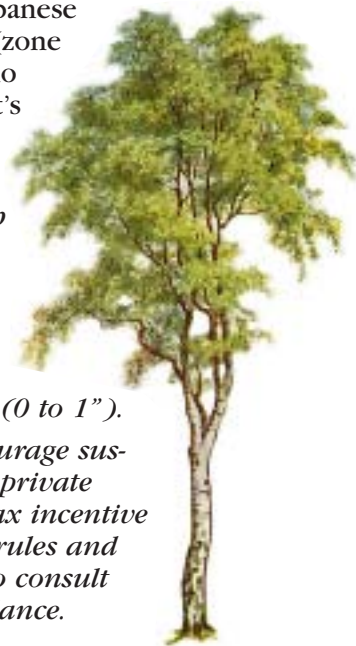
But it wouldn't be spring without new plants arriving. The only difference this year will be that my choices will be guided by reason, not impulse. Red maples will arrive to fill a section of unused lawn and native evergreens will replace a former garden. I'll expand the planting of white birch, and then put in a sprinkling of shrubs.

And maybe I'll find a place for just one impulse purchase. Will it be a pale yellow 'Lemonade' magnolia, or a shimmery red tree peony called 'Boreas' (The North Wind), or maybe even a Japanese maple called 'Geisha Gone Wild' (zone six, I know, but gorgeous, and who could resist that name?). I think it's time to hide those catalogs.

**Susan Knorr, Editor**

*\* It is possible to enter MFL with 200 trees per acre—but the density must be brought up to 600 trees per acre very soon after entry. It may take a couple of years but this is the level required for seedling sized trees (0 to 1").*

*Wisconsin's forest tax laws encourage sustainable forest management on private lands by providing a property tax incentive to landowners. There are many rules and regulations for each program, so consult your local DNR forester for guidance.*  
<http://dnr.wi.gov/forestry/ftax/>





# Kidland Dunes

A Dunesletter page for kids and kids-at-heart! By Belinda and Teresa Zoller



## Woodcocks

As the weather gets warmer and warmer, all the little creepy crawly bugs will come out of the ground again. While this may not seem very appealing to you, it means a feast for all the birds on their way back from the southern states. You might see them all over your yard at times, eagerly watching and listening for an earthworm or bug.

Among these birds returning from the South is the woodcock, or “timberdoodle” as it is sometimes called. These birds have small, round bodies and mottled brown feathers. You can tell a woodcock from any other bird by their long, tweezers-like bill, which is used for digging in the ground.

Keep a sharp ear out for their loud “peent” as the weather gets warmer this spring.

## Shamrocks: Nature's Lucky Charms

Yes, it's that time again. The world is getting green again, the air is warming up, and leprechauns start popping up in random places with shamrocks. Okay, I'm kidding about that last one—partly. When the snow has finally melted and the mud dries up, it's hard not to notice that, besides the growing grass, wood sorrels (the official, boring name for our favorite St. Patrick's Day flower) are carpeting the ground as well. You've seen them before—along with their familiar green, heart-shaped, clover-style leaves, they sprout tiny petaled flowers in various colors: yellow, white, and pink, although yellow wood sorrel is the most common species.

Although we tend to think of them as springtime decorations, shamrocks are also edible. In the early days of

our country, the American Indians used them in their medicines. Their sour taste, which has been compared to that of a lemon, is reported as a satisfying thirst-quencher as well.

Today many people use shamrocks as a salad topper or edible accent for their meals—their sour taste can add some nice flavor. For a St. Patrick's Day themed drink, you can freeze the clovers or flowers in an ice cube tray and drop the colorful cubes in your water or other beverage. (Wood sorrels do contain a small amount of oxalic acid, so don't eat a lot, and always ask an adult first.)

Keep an eye out for wood sorrels this season, and when you find one, consider yourself lucky.

## Hummingbirds are oh-so-very colorful!



## Nature Notebooks . . . Try It!

Although watching nature programs on TV or reading the Dunesletter are good ways to learn about nature, there's nothing like going outside yourself and seeing what wildlife you can find. And if you do that, you'll want your own nature notebook kit to record your experiences using art, words, or a combination.

- Hobby Lobby has some high-quality colored pencils, watercolors, and sketchbooks of various sizes. Choose the materials that you enjoy using the most. Sketching should be fun, not a laborious art project.
- If you'd rather write than sketch, that's okay too. A field guide or two will help you learn more about what you're observing, and the illustrations inside can help you finish your drawings or journal entries later.
- A camera can give you an instant snapshot of your observations, but keep the shutter sounds and flash turned off so you don't disturb wildlife.

Sources: <http://botanical.com/botanical/mgmb/a/sorwco68/bt1m>, [http://ppws.vt.edu/scott/weed\\_id/mast.html](http://ppws.vt.edu/scott/weed_id/mast.html), *Wild Wisconsin Notebook*, by James Buchholz; [alaboutbirds.org](http://alaboutbirds.org); [defenders.org](http://defenders.org)



*blue-spotted  
salamander*

## East and West Twin River Sampling

Tuesday, March 22 • 10:00 a.m. to noon

Both the East and West Twin Rivers have sections considered impaired waterways due to pollutants. These river segments are not meeting their potential for supporting aquatic life or recreational activities. Woodland Dunes coordinates an on-going river monitoring effort for the East and West Twin Rivers so we can better understand these important waterways. If you are interested in taking a couple hours to sample each month the river is ice-free, please join us for this training. All of the knowledge and equipment to sample will be provided. Please join us for lunch following the training.

## Woodland Dunes Salamander Study

Join us for a spring salamander study on the Woodland Dunes preserve. If you are interested in helping set and check live-traps please contact Kelly at [kellye@woodlanddunes.org](mailto:kellye@woodlanddunes.org) or call (920) 793-4007. Two species of salamander have been found here: blue-spotted salamanders and red-backed salamanders. (The blue-spotted is by far the most commonly found.) The juvenile stage of a newt was also found in the 1980s. Through previous studies we have learned that Woodland Dunes is an important habitat for blue-spotted salamanders. According to DNR range maps, spotted salamanders, eastern tiger salamanders, central newts, four-toed salamanders (recorded at Point Beach) and mudpuppies could be living within the preserve. The better we understand what species are here and where they occur the better we can work to protect and manage this ecologically sensitive area.

## Annual Midwest Sandhill Crane Count

Saturday, April 16 • 5:30 to 7:30 a.m.

Woodland Dunes coordinates the Manitowoc County portion of this survey compiled by the International Crane Foundation. The count gathers data on the abundance and distribution of sandhill cranes in Wisconsin and neighboring states, and information on the habitats they prefer. Counters choose or are assigned a site in Manitowoc County. More than 30 sites used by cranes have been identified. Last year, only seven sites were surveyed so there are many available for new volunteers. Information will be available at the Bird Club meeting on Tuesday, April 12 at 7:00 p.m., or contact Jim at 793-4007 or [nature@woodlanddunes.org](mailto:nature@woodlanddunes.org) for information and count materials. *Coordination of the Woodland Dunes Citizen-Science activities is funded by a grant from the Department of Natural Resources Citizen-Based Monitoring Program.*

Interested in helping in the Star Butterfly Garden this year? Call the Nature Center for information.



*Kelly Vorrone teaches the Winter Landscape on Snowshoes class.*

## Adult Education Series

*The Wonder of It All* series, sponsored by the Dominion Foundation, presents monthly programs by natural resource professionals. Programs are open to the public. After attending six sessions you will receive a Woodland Dunes T-shirt. Check our website and events page for upcoming programs.



**central  
newt**

## The One Newt

What is the difference between a salamander and a newt? The simple answer is nothing—a newt is a specific type of salamander, namely, a member of the family Salamandridae. In other words, all newts are salamanders, but not all salamanders are newts. (This is also a statement you can make about toads and frogs, all toads are frogs, but not all frogs are toads.) Two features that separate newts from other salamanders are the lack of costal grooves (look like ribs on the salamanders) and the presence of two longitudinal ridges on top of the head.

The DNR only lists the central newt (*Notophthalmus viridens louisianensis*) as being found in Wisconsin. Courtship and mating of the central newt occur in the fall, winter and spring. Females can lay over one hundred eggs, either singly or in clusters. They are attached to plants in the water. Larvae hatch in the late summer and either metamorphose into efts (juvenile stage) or aquatic adults. Following the eft stage, which can last from one to four years, they become sexually mature aquatic adults. If the aquatic adults find their ponds drying up, they transform into a terrestrial adult until their pond refills with water.

The spots and the efts' coloration, are warnings of toxic skin secretions. Because of this chemical defense, newts can coexist with fish, which often eat other salamanders. We are looking forward to seeing if we can find this species during the spring salamander study.

**Kelly Vorrone, Education Coordinator**

# Volunteers

## Beverly Vareka

On Monday, February 25, 1980, the Board of Directors met at UW-Manitowoc. Woodland Dunes had only been in existence for about two years, and there was much activity involving purchasing land, organizing finances, forming policies, and working with the staff of several naturalists. The Marsh Haus was being improved, and new chairman Steve Winter took over the reins from Bob Niquette.

At that meeting, Helen Dicke-Krivacek nominated Beverly Vareka to be Treasurer for Woodland Dunes, a position for which she continued to volunteer for the next 27 years. Beverly had a background at UW-Madison in pre-medicine and received her degree in Zoology, was president of the Junior Service League and Manitou Council of Girl Scouts, and had been the manager for H & R Block's office in Two Rivers. Not only did she organize and keep our financial records and pay bills, she attended countless Board and Finance Committee meetings and worked closely with Bernie when he was President and later Executive Director, and with me when I came on board in that position. Beverly's attention to detail, and faithful and consistent help as volunteer Treasurer made all the difference to Woodland Dunes. She has been a great help to me, especially when I was learning the ropes as director. She retired as Treasurer in 2008, but has remained on our Board and Finance Committee. Beverly has decided to retire from our Board now, although she continues to help as a member of the Finance Committee.

We all owe Beverly our thanks for her significant contribution as an exceptional volunteer for Woodland Dunes. Being Treasurer, especially for so many years, for a growing organization is no easy task, and we have been very, very fortunate to have her help. Thank you, Beverly. We wish you and Joe all the best.

**Jim Knickelbine, Director**



Beverly Vareka



## Volunteer of the Year: LouAnn Gray

About eight years ago, my friend Dan mentioned that his mom had just retired from the nursing profession. He said that she loved being around children (even though knowing Dan, I suspect she barely survived raising her four sons!) and wondered if she might want to volunteer at Woodland Dunes. I knew LouAnn a little, having talked to her several times at Dan's family gatherings and was familiar with her friendliness, great sense of humor, and obvious intelligence. So, at Dan's suggestion, I gave her a call and asked if she'd be interested in helping us out, and that we especially needed volunteer teacher-naturalists. As I remember she thought about it a little, but soon said she'd come out to see what we do here. She did, I introduced her to Bernie, and thus began a relationship that has resulted in Lou Ann's being chosen as Volunteer of the Year for 2010 by our staff. Lou Ann is the only teacher-naturalist involved in every school program offered at the Nature Center. She can also be found at many of our weekend education events. Lou Ann is not only a dedicated teacher-naturalist but also a very talented one. Her enthusiasm for what she is teaching transfers to the children who spend time with her. Winter, spring, summer or autumn, you can find her out on the trails, passing on her love of nature to the children who visit Woodland Dunes. We are fortunate that she loves it here as much as we love having her as a volunteer.

**Jim Knickelbine, Director**

## Board of Directors

### New Board President

At the January meeting **Tom Kocourek** was installed as the new board president, replacing retiring president **Bob Weinert**.

### New Board Members

**Jody Henseler** (below) has been a teacher in the Manitowoc School System since 1997. She currently teaches sixth grade. A graduate of UW-Stevens Point, she has a masters degree in Natural Resources Environmental Education. She is an outdoor enthusiast, and loves to camp and canoe with her husband, Rob, and two sons. She is also a musician, playing with her husband in the group Wild2N; they play at Woodland Dunes Folk Concerts among other venues. Jody is a member of the Education Committee.

**Susan Knorr** recently retired as Assistant Director of Woodland Dunes, but continues to edit *The Dunesletter*, provide graphic design services and volunteer at Woodland Dunes events. She previously worked for Fairchild Tropical Garden in Miami as Publications Director and Editor of *Garden Views*, their member magazine, and served on the Architecture Committee. After moving to Two Creeks, at the instigation of Winnie Smith, she started to volunteer at the Dunes and then became an employee. She is also a docent at the Rahr-West Art Museum. Susan is a member of the Marketing Committee.



Jody Henseler and son at the Snowball

# Thank You



The following reflect gifts, donations and memberships received through February 15, 2010.

## Grants

Harold C. Kallies Charitable Trust  
\$2,500 for environmental education

## In-Kind Donations

Associated Bank: two computers  
Fricke Printing: posters for the Snow Ball, Moon Walks and Chocolate and Candlelight

## Donations (non-monetary)

Tom and Betsy Kocourek:  
four clipboards for the education program  
six dozen cookies for the Snow Ball  
groceries for Chocolate & Candlelight  
Rita Jandra: book for the library  
Traci Hoeltke: afghan blanket  
Marion Strzyzewski: fox pelt  
Al Seidl: bulletin boards  
Chuck Sontag: cards for the gift shop  
Dr. Gahl: ten pair of snowshoes  
Fran Brinkman: dry erase markers  
Gary Erickson and Suzanne Jageman: two telescopes  
Bob and Shirley Phillips: rain barrel kit  
Ed and Lee Brey: children's book

## Matching Funds

US Bank  
Thrivent

## Memorials

William and Traci Hoeltke in honor of *Jim Mahloch*  
Julie Rathmanner in honor of *Dr. Robert Bush*  
Geri Berkovitz in honor of *Ken Carstens*  
Donna Bruns in honor of *Margaret Riel*  
Shirley Rozman in honor of *Margaret Riel*  
Jo Dube and Edy Lyon in honor of *Glenn Dahlke*  
Mary Claire Mullins in honor of *August Schuette*  
Charles and Marilyn Sontag in honor of *Helen Alyea*  
Karen and Kenneth Schweda in honor of *Frances Bodwin*  
Dorothy Rodefeld in honor of *Elaine Rudie*  
Alan Rudie in honor of *Elaine Rudie*  
Donald Swensen in honor of *Paul Freimuth*  
Grace and Robert Peppard in honor of *Paul Freimuth*  
Janet and Jeffrey Kohn in honor of *David Schaap*

## New Members

Shirley Crowley  
Ken, Sandra and Tracy Folz  
Todd, Lisa and Jacob Gilmore  
Pastor Kim Henning  
Gary Erickson and Suzanne Jageman  
Kay Kaufman  
Betsy and Allen Loughead  
Wendy Lutzke  
Amber Mueller  
Catherine Pape  
Gary Siegfried Family

## Owl Adoptions

Elijah Hoeltke from *Uncle Bill and Aunt Traci*  
Traci Hoeltke from *Bill Hoeltke*  
Thomas Sharrowgift from *Aunt Megan*

## Chocolate and Candlelight

**Volunteers**  
Ed and Lee Brey  
Jody and Rob Henseler  
Jacob Johnsrud  
Jim and Emma Knickelbine  
Jim Welnetz  
**Monetary Donation**  
Knickelbine Family: donation towards music  
**In-Kind**  
M&M Lunch and Catering: chocolate fountains, chocolate  
Honey Pot: 30 candles  
**Chocolate Treats**  
Jessica Johnsrud  
Donna Langman  
Ellen Lewellen  
Emma and Jim Knickelbine  
Susan Knorr  
Tom and Betsy Kocourek  
Kelly Vorrone  
Lucy Zeldenrust

## Snowball

Thanks to Al Seidl for woodburning the Snowball awards.  
**Volunteers**  
Don Debruyne  
Joan Hanson  
Linda Klessig  
Jim and Susan Knorr  
Betsy and Tom Kocourek  
Barb Kussman  
Jeannie Miller  
Bonnie O'Leske  
Rachel Welch  
Jim Welnetz  
John and Julie Woodcock

## Silent Auction Donors

Jean Biegun  
Chow Chong/Unique Flying Objects  
Bob and Kathryn Gahl  
Jim and Mary Hoftiezer  
Jim Knorr  
Tom and Betsy Kocourek  
Donna and Kent Langman  
Ellen Lewellen

## Fund Drive

Dr. Edward and Chrystina Barylak  
Joseph R. Branks  
Robert and Therese Brey  
David and Patricia D'Aoust  
John and Kristin Epstein  
Meghan and Dean Hessler  
Bruce and Lesley Huffer  
Donald and Debra Knudsen  
Marjorie Pries and Paul Baker  
Gene Sandvig  
Megan Sharrow  
Daniel and Gail Terry  
Janice Tetzlaff  
Gerald and Germaine Waak

## Corporate Members

**Explorer Level (\$500-\$999)**  
Bank First National  
Browns of Two Rivers  
Fricke Printing Service  
**Ecologist Level (\$300-\$499)**  
Crafts, Inc  
**Conservator Level (\$151-299)**  
Foster Needle Co., Inc  
Investor's Community Bank  
Lakeshore Express, Inc  
Lakeside Foods, Inc  
Red Arrow Products Company, LLC  
The Manitowoc Company, Inc  
Vinton Construction  
**Defender Level (\$50-\$150)**  
Associated Bank of Manitowoc  
Carron Net Company, Inc  
Cawley Company  
Green Construction, LLC  
Hamann Construction Co.  
Heresite Protective Coatings  
Ihlenfeld, Skatrud and Anderson, Inc  
Jagemann Stamping Company  
Kurtz's, Inc  
Malley Printing Company  
M.D. Remodeling, LLC  
Northern Labs, Inc  
Schaus Roofing and Mechanical  
Schenk, SC  
Twin River Turf  
Wisconsin Webwriter, LLC

## Winter World Volunteers

Lou Ann Gray  
Bill Hoeltke  
Ellen Lewellen  
Jim Knorr  
Jeannie Miller  
Mary Ozarowicz  
Rachel Welch  
Thank you to Tom and Betsy Kocourek for photographing the Winter World program.

## Correction

We apologize for misspelling Pauline Strohfeldt and Floyd Strohfeldt's names



Winter World training

# Helping the Dunes

## Go Green

Here's a simple way to go green: receive the full color version of the Dunesletter and information about upcoming events electronically instead of through regular mail. This saves paper and loads of energy. Simply email [jessicaj@woodlanddunes.org](mailto:jessicaj@woodlanddunes.org) with your name and email address. Current and recent issues are on our website, [www.woodlanddunes.org](http://www.woodlanddunes.org).

## Native Tree and Shrub Sale

Think Spring! Order native trees and shrubs through Woodland Dunes. You will receive high quality, native plants and support one of your favorite non-profits. Orders are due March 18; order forms can be found on our website, at the Nature Center or email [jessicaj@woodlanddunes.org](mailto:jessicaj@woodlanddunes.org). Order early to ensure the plants you want!

## Bird Seed in the Shop

Woodland Dunes has teamed up with Country Visions Cooperative to offer several types of bird seed for sale. We carry large bags of black oil sunflower seed and also a basic millet mix, and niger (thistle seed).

## Wish List

**Three 4' x 3' dry erase boards** for posting schedules at our events. A large board is \$69.50; a small board is \$37.99. They would save a lot of paper.

## We Care Donation Program

Sign up for the "We Care" program at Pick and Save. Each time you use your Advantage Plus Savers Club card, Woodland Dunes receives a cash rebate, a percentage of the total amount of "We Care" dollars that Pick 'n Save contributes. To register, visit the Customer Service Desk at the Two Rivers Pick 'n Save store.

## Adopt an Owl

For \$25 you can adopt a saw-whet owl caught and banded at Woodland Dunes. Funds raised from this program support the mission of Woodland Dunes. Call for details.

*We apologize for any errors or omissions in this issue. Please let us know, and we will print a correction in the next issue of The Dunesletter.*

## Memorial Bricks and Boulders

Celebrate the life of someone dear to you by purchasing a brick or boulder to reflect their love of nature, Or memorialize a favorite relative whose personality brought light to your life, or someone with whom you shared precious moments. Your message will be engraved and highlighted in black.

As you honor the memory of a loved one, you also provide much needed funding to support Woodland Dunes. Choose from a 4" x 8" brick paver or a basketball size boulder made of natural stone. The brick pavers will border Woodland Dunes paths and gardens near the Nature Center.

*To purchase a brick or boulder, fill out the form below and send it to Woodland Dunes. If you have any questions, contact Jessica at 793-4007 or [jessicaj@woodlanddunes.org](mailto:jessicaj@woodlanddunes.org)*

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City/State/Zip: \_\_\_\_\_

Phone: \_\_\_\_\_

Email: \_\_\_\_\_

4 x 8 Brick Paver (12 characters per line, maximum two lines) \$75


Natural Stone Boulder (12 characters per line, maximum two lines) \$200


Please make checks payable to Woodland Dunes Nature Center  
PO Box 486, Two Rivers, WI 54241-0486

## Remember Woodland Dunes in your Will

When I first moved to Two Rivers in 1981, Helen Dicke took me out to Woodland Dunes, telling me I was going to love it. She was right! I did, I do and I'm sure I will for the rest of my life. I have been a TN, been on the Board of Directors for at least 25 years, am a guarantor and, in general, try to be helpful. I can think of no better place to spend my time and money. With that in mind, I have included Woodland Dunes in my will, giving the organization a percentage of whatever is there when I no longer am.

I would encourage others to consider leaving a legacy for Woodland Dunes. It's easy to do, and it makes me feel good to know I will be helping this very worthy organization educate future generations of children, adults and students of all ages.

**Lucy Zeldenrust**

# Woodland Dunes

## Become a member!

Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_  
State \_\_\_\_\_ Zip \_\_\_\_\_  
Phone \_\_\_\_\_  
Email \_\_\_\_\_

- \$25 Individual
- \$35 Family
- \$50 Patron
- \$100 Contributor

### Guarantors

- \$250 Conservator
- \$500 Benefactor
- \$1,000 Steward
- \$5,000 Guardian

Please send this form and your tax-deductible donation to Woodland Dunes today.

## Board of Directors

### Officers

Tom Kocourek

*Chairman*

Don DeBruyn

*Vice Chairman*

Troy Christiansen

*Treasurer*

Lyn Brouchoud

*Secretary*

## Board Members

Helen Bleser

Ed Brey

Robert Gahl

Jody Henseler

Susan Knorr

Donna Langman

Ellen Lewellen

Charles Sontag

Bob Weinert

John Woodcock

Lucy Zeldenrust

## Headquarters

Hwy. 310 west of Two Rivers

### Hours

Monday - Friday: 9 a.m. to 4 p.m.

Saturday:

Summer • 9 a.m. to noon

Winter • by appt. or for events

Hiking trails open year round

Phone (920) 793-4007

nature@woodlanddunes.org

www.woodlanddunes.org

### STAFF

Executive Director: Jim Knickelbine

Assistant Director/Education Coordinator

Kelly Eskew Vorrn

Development and Marketing Coordinator

Jessica Johnsrud

Administrative Assistant: Geri Berkovitz

Environmental Educator: Bernie Brouchoud

The Dunesletter is published quarterly by Woodland Dunes  
Nature Center and Preserve, Inc. ISBN 1933-8961

Susan Knorr, Editor

Nonprofit  
Organization  
U.S. Postage  
PAID  
Mantowoc, WI  
54220  
Permit No. 448

Woodland Dunes Nature Center  
P.O. Box 486  
Two Rivers, WI 54241-0486  
woodlanddunes.com  
RETURN SERVICE REQUESTED

