



The Dunesletter

A Publication of Woodland Dunes Nature Center and Preserve



Owlfest 2009

We delighted to announce that Christian W. Cold, wildlife technician and educator for the Wisconsin Department of Natural Resources, Bureau of Wildlife Management, will be our featured guest at Owlfest. He'll tell us all about the 12 species of owls in our region (permanent and seasonal residents, and occasional transients). You'll learn about identification, preferred habitat, diet and population status and meet his horned and barred owls. A licensed falconer and bird bander, he maintains a small fleet of native raptors and herptiles for educational programs.

Autumn 2009

Volume 137

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From the Director

For man, autumn is a time of harvest, of gathering together. For nature, it is a time of sowing, of scattering abroad. ~Edwin Way Teale

I hope you all enjoyed a wonderful summer. The relative cool temperatures this year were quite appreciated by our staff and hard-working volunteers!

We are making progress on a number of projects. Our play area has begun to take shape, and we encourage parents and children to explore there. New fencing is in place, we have a new bird feeding station, a twisty prairie path, an art table, a frog pond, a place to build shelters among the trees, and new fruit and shade trees to protect and feed our young visitors. We still have much to do, but we hope you will stop by and take a look.

The Ice Age Trail is also progressing—watch for a grand opening this fall. Most of the trail has been cleared, and a new boardwalk has been built. We have some additional clean-up work to do in one area, and new signs need to be installed. We are looking forward to making this trail available to all of you, and to working with our neighbors to the south, the Aurora Medical Center, on whose property the trail will continue. Linking our trails to their healing garden and, ultimately, to Mariners Trail will add new dimensions to hiking here.

We are working on a newly funded project, one that will allow us to map certain invasive plant species in Manitowoc County. Basically, our team will locate and record the locations of those infestations, plot them using a GPS receiver, and prepare a map of the data. We hope that this will serve to illustrate the extent of those invasives, and make future control activities more effective. At this time, many of the invasive plants that we worry about are only found in small numbers here, and we feel they may be controllable. If you could help with this important project, please contact me. Our thanks to the Wisconsin DNR for funding this Citizen-Based Monitoring grant project.

Our fall school programs begin as soon as children return to school. In August, we had a number of teachers register early for field trips, and we plan to be busy through the academic year.

With the start of the school programs also comes the start of our fall bird banding activity. Banding songbirds is an important part of our first-grade program. By October we will be set to open the nets to catch migrating saw-whet owls as they pass through our area. Last year the weather was warm and unfavorable for large owl movements here—we hope for a more seasonal October this year.

We are planning for our major fall events, Owlfest, and the Winnie Smith Dinner, which will again take place at the beautiful Grace Congregational Church in Two Rivers. We are excited to welcome Dan Small, longtime host of *Outdoor Wisconsin* on Wisconsin Public Television, as our featured speaker. Please contact our office if you are interested in attending.

Wishing you a fantastic fall,

Jim Knickelbine, Director



We've planned for plenty of seating in the Little Wings play area.

Coming Events

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

Aegolius Bird Club Field Trip

Saturday, September 12 • 8:00 a.m.

Look for autumn migrants at Henry Schuette Park. Meet in the lower parking lot in the park.

Rain Gardens

Tuesday, September 15 • 6:30 p.m.

Jim Seiler of Rolling Acres Native Landscape Nursery will talk about the whys and hows of rain gardens. Sponsored by the Lake Woods Chapter of Wild Ones.

Five Buck Hoot

September 26 • 7:00 p.m. (Doors open at 6:30 p.m.)

Admission: \$5; under 12, \$2

Long-time favorites Fritz Schuler & Bug-eyed Pete will have you hootin' and hollerin' with their rollicking old time music.

Enchanted Forest

Friday, October 2 • 6:30 to 8:30 p.m.

Members: family, \$5; individual, \$3

Non-members: family, \$8, individual, \$4

Journey through the forest to discover Mother Nature's autumn secrets. Animals, woodland folklore and fortune tellers will await visitors who enter the Enchanted Forest. The self-guided hike will be outside; indoor space and warm refreshments will be available. This will be an educational evening, not a scary one. Please wear costumes and warm clothing—it's no fun when you're cold!

Five Buck Hoot

October 10 • 7:00 p.m. (Doors open at 6:30 p.m.)

Admission: \$5; under 12, \$2.

Join us for a night of family fun and music from Pete Johnson & WILD2N that everyone will enjoy.

Owlfest

Saturday, October 17 • 8:00 a.m. to noon

Members: family, \$5; individual, \$3

Non-members: family, \$8, individual, \$4

(See page 3)



Aegolius Bird Club Meeting

Tuesday, October 13 • 7:00 p.m.

Christopher Katz, Two Rivers veterinarian, will give a presentation on bears.

Harvest Dinner

Saturday, November 7

Speaker: Dan Small

(see page 3)

Aegolius Bird Club Meeting

Tuesday, November 10 • 7:00 p.m.

Michael Moore, Georgia Pacific, will be the speaker.

Aegolius Bird Club Field Trip

Saturday, November 14 • 1:00 p.m.

Observe loons and waterfowl at Fischer Creek, Kingfisher Farm, and in Cleveland. Meet at the UW-Manitowoc parking lot.

Aegolius Bird Club Meeting

Tuesday, December 8 • 7:00 p.m.

Roger Van Voltenberg will give a presentation on falconry.



Director Jim Knickelbine gives one of the Woodland Dunes' turtles a summer outing.

Teacher-Naturalist Special Training

Forest Ecology

Thursday September 17 • noon to 3:00 p.m.

Sue Crowley, DNR Forester, will guide us on a hike through Woodland Dunes to discuss forest ecology. This is your chance to pick the brain of a forest expert. Wear sturdy shoes and be prepared for a 1.5 to 2-mile hike. We will be exploring Woodland Dunes' newest trail.

Mushrooms!

Tuesday, October 13 • 1:00 to 3:00 p.m.

Explore the world of mushrooms with Rebecca Abler, UW-Manitowoc professor. We will start indoors with an introduction to fascinating fungi, then hit the trail to see what we can find.

Rent a Naturalist

Looking for a special excursion for your group or family? You can rent one of our trained naturalists for \$25/hour to lead you along one of Woodland Dunes' trails. Explore prairie, marsh, woodland or forest with someone who can tell you fascinating stories about the things you see. Call the Nature Center at 793-4007 to set a date.

Adopt an Owl

For \$25 you can adopt a saw-whet owl caught and banded at Woodland Dunes. You will receive a certificate of adoption with the band number of your owl, a photo of a saw-whet owl, and a form for recording recaptures. Funds raised from this program will support the mission of Woodland Dunes. Please call for details.



For information, call (920) 793-4007 or check our website at www.woodlanddunes.org.

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

Coming Events

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



Dan Small, host of Outdoor Wisconsin

Dan Small to Speak at Harvest Dinner

The annual Winnie Smith Harvest Dinner will be held at 6:00 p.m. on November 7 at Grace Congregational Church in Two Rivers. We are planning a bounteous dinner catered by The Courthouse Pub with table decorations by Ruth Kloss. Lucy Zeldenrust will coordinate the silent auction with the help of Tom and Betsy Kocourek.

We are pleased to announce that the speaker for the event will be Dan Small, the host and producer of WMVS-TV's *Outdoor Wisconsin* since its premiere in 1984. He produces and hosts a weekly radio show, *Outdoors Radio with Dan Small* and is a contributing editor of *Wisconsin Outdoor News*.

Dan is an avid outdoorsman and a widely published writer/photographer. His writing has won numerous awards in regional and national competition.

Dan is host of the *North American Trails Home Video Library* series and author of *Fish Wisconsin*. He co-wrote the *Outdoor Wisconsin Cookbook* and its paperback version, the *Wild Harvest Cookbook*.

Dan serves on the Milwaukee River Revitalization Council at the appointment of Governor Jim Doyle. He is a former director of the Friends of Milwaukee's Rivers, the Ice Age Park and Trail Foundation, the Wisconsin Outdoor Communicators Association, the Association of Great Lakes Outdoor Writers and the Outdoor Writers Association of America. He holds a Ph.D. from Rice University.

To Attend

Tickets to this fund-raiser for Woodland Dunes are \$50 per person. Seating is limited; reservations are required. To reserve your place, please send a check made out to Woodland Dunes to

Susan Knorr, Assistant Director
Woodland Dunes
P.O. Box 486
Two Rivers, WI 54241

Owlfest

Saturday, October 17 • 8:00 a.m. to noon

Members: family, \$5; individual, \$3 ~ Non-members: family, \$8, individual, \$4

Free admission with the purchase of a new Family membership (\$35)

Plan on spending the entire morning at Woodland Dunes for this popular event. The stars of the show, tiny saw-whet owls, migrate through the area this time of year, and our trained naturalists will be banding them as part of an on-going research project. You'll have the opportunity to watch as the owls are released back into the wild to continue their journey.

You'll enjoy meeting our featured guest (see page 1), Chris Cold, and his friendly owls. Chris serves as a mobile, non-formal educator for the DNR, traveling extensively throughout Wisconsin to offer programs on wildlife and related topics of natural history. In his spare time he fishes, takes nature hikes, wades & snorkels in area streams, reads natural history, and collects fossils and natural objects.

You can also join in a guided nature hike, and tour the nature center and the natural history displays. We have fascinating activities planned for kids, including the always popular pumpkin decorating. Music on the porch will feature Celtic and folk favorites.

To add even more excitement to the day, buy a raffle ticket for a kayak or a beautiful saw-whet owl mirror, each valued at more than \$350.

And if you get hungry, you'll find brats and hamburgers with all the trimmings being sold by Browns of Two Rivers, and delicious desserts at the Night Gang booth.

For a long-lasting souvenir of the day, you can Adopt-An-Owl. You'll get an adoption certificate and the satisfaction of supporting research concerning saw-whet owls and the mission of Woodland Dunes, to protect land and provide environmental education to all.



a long-eared owl at Owlfest 2008.

Notes from Nature

More Brushfooted Butterflies



The Brushfooted Family (Nymphalidae) includes six subfamilies, including the True Brushfoots (Nymphalinae), the most prevalent of the six. Members are found worldwide. Within the sub-

family of True Brushfoots are the Checkerspots, which are distinguished by their striking undersides. The Silvery Checkerspot (*Chlosyne nycteis*) (above left) is common in Manitowoc County. The populations of two other Checkerspots, the Gorgone (*Chlosyne gorgone*) and the Harris (*Chlosyne harrisii*) vary dramatically from year to year.

These small butterflies can be hard to differentiate as they have only a one to two inch wingspan and are similar in appearance. Their wings are marked in patterns of orange, black and white. The word Checkerspot refers to the zigzag pattern of oranges and blacks found on the upper side of the wings. Because they are so small, and their markings so similar, you would be well-advised to keep a guidebook close at hand to differentiate among them.

The Silvery Checkerspot is often found in damp, wooded areas. It tends to fly and perch low in the trees or grasses. The Harris Checkerspot lives in moist meadows, the edges of bogs and old fields. The Gorgone Checkerspot lives in fields, open forests and the grass found along roads.

Checkerspots seek mates by patrolling or perching in waiting. They are believed to be territorial, with numbers limited in each territory.

Silvery Checkerspots use milkweed, staghorn sumac, clovers, red clover and vetches for nectar. The Harris Checkerspot prefers spreading dogbane and vetches, and uses damp soil for moisture. The Gorgone Checkerspot's food is compositae, sweet clover and milkweed. When you visit the Star Butterfly Garden, you are more likely to see Painted Ladies and Red Admirals than checkerspots, because they feed on a more varied group of plants.

Eggs are laid in clustered groups. Host plants for the Silvery Checkerspot and Gorgone caterpillars include asters, sunflowers and Black-eyed Susans. The Harris caterpillars depend on flat-topped white asters and occasionally goldenrod for food.

Throughout most of our state, one brood a year is common, although a partial second generation may occur in the south. In the winter they survive as caterpillars. These butterflies are still being observed and information recorded to give us a clearer picture of how they live their brief lives or even how long they live.

Jenene Garey, Volunteer

In some references, the genus name given for these butterflies is Charidryas.

Is Your Backyard A Fast-Food Joint?

We do not leave the doors unlocked in our homes or businesses when we leave because somebody could take advantage of our absence to steal our possessions or merchandise. Like criminals, animals are opportunists too. Deer are drawn to the tastiest plants within easy reach (often our most prized flowers). We can't blame them because we too often take the easy way over the hard way. What we need to do is heighten our awareness of situations that may attract our opportunistic creatures.

Wild animals that have lost their wariness with humans also tend to have shorter life spans. That's because they are usually our problem critters, and are frequently killed or relocated (relocation is usually a death sentence too). How can we keep the wild creatures wild? The easiest and most effective method is to remove any opportunities around your property that are particularly attractive and easy for wildlife to take advantage of.

Denying opportunities to the most common creatures that we may encounter, such as opossums, skunks, foxes, mice, rats and raccoons, boils down to good housekeeping as follows:

- Stuff cracks and holes with steel wool around building entrances and foundations (critters are unable to gnaw through it).
- Keep foundations, roofs and walls in good repair, and vents and windows screened.
- Don't leave doors or windows open to allow your pet to run out, use a lockable swinging pet door instead.
- Feed pets inside or, if you must feed outside, pick up the food bowls when pets are done eating (sensitive noses can still pick up the scent of food on well-licked bowls).
- Keep garbage inside a building or use heavy duty, tightly covered garbage containers.
- Bird seed and pet food should be kept inside too.
- Make sure livestock/poultry are enclosed nightly in predator-proof barns/pens. This will include wire fencing or foundations that go below ground to prevent digging under, and roofs or heavy wire tops over pens.

By following these guidelines you can greatly decrease the chances that the wild critters in your neighborhood will consider your place a convenient fast-food joint.

Wildlife of Wisconsin, Manitowoc Area Rehabilitators

Injured Birds and Animals

If you find an injured or abandoned animal, please DO NOT bring it to Woodland Dunes. We are not licensed to accept any wild animals and CAN NOT accept them. Instead, please 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 as to the best action to take.



American Beech

The American beech (*Fagus grandifolia*) is one of the most easily recognized trees in the eastern United States. Unless it is damaged or diseased, the bark of a beech tree is smooth and gray at all ages. Its coarsely-toothed leaves are arranged alternately on the zig-zag twigs. Each leaf is three to six inches long, elliptic with a pointed tip. Nine to fourteen parallel veins run from the midrib to the tips of the teeth. Leaves turn yellow in fall, then brown. They often remain on the tree through the winter. The inch-long narrow, pointed buds, with many overlapping brown scales, cannot be confused with those of any other tree.

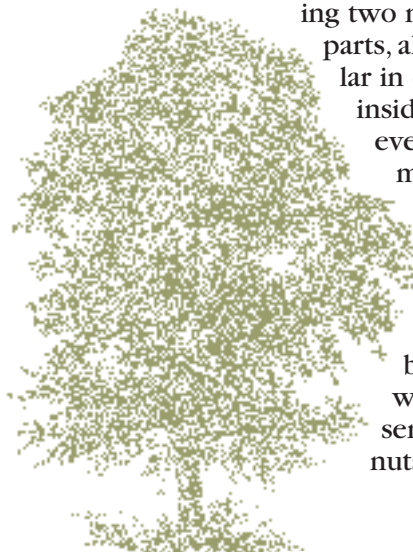
The beech is a medium to large tree that is found from the Gulf states north to southernmost Canada. The western boundary of the beech's range runs through Wisconsin, from a few miles west of Lake Michigan in the southeast to Langlade County in the north-central part of the state, then north to the state line. Beech grows in moist fertile soils rich in humus, along with sugar maple, yellow birch, black cherry, basswood, and eastern hemlock.

Beech trees grow slowly. When growing among other trees, they are tall and straight. They may be 60 to 80 feet tall, or, rarely, reach 120 feet. In the open, they may be shorter, but widely spreading. Their trunks may be two to three feet (rarely four feet) in diameter. The largest trees are found in the Ohio and Mississippi River valleys. Beech root systems are shallow and spreading. They may send up sucker shoots from their roots, which can develop into new trees. Pure groves of beech, all originating from the roots of a single tree, are sometimes found. Beech wood is strong and hard, but not very durable. It has been used for tool handles, clothes pins, furniture, and flooring. It makes excellent firewood.

Beech flowers emerge as the leaves unfold, in late May in our area. Male flowers are crowded into globe-shaped heads, about one inch in diameter, that dangle on slender two-inch-long stalks. Female flowers are about one-quarter inch long, growing in pairs near the tips of the branches on the same tree. They develop into prickly burs nearly an inch in diameter, each containing two nuts. In early fall the bur splits into four parts, allowing the nuts to drop. Each nut is triangular in cross-section, with a sweet edible kernel inside. Good crops of nuts are produced once in every three to five years. In poor years, nuts may be produced, but they have no kernels.

In years of good production, beech nuts provide food for many species of mammals and birds. They are known to be eaten by squirrels, chipmunks, rabbits, raccoons, deer, bears, grouse, turkeys, and wood ducks. They were a favored food of the now extinct passenger pigeon. When they can be found, beech nuts are a treat for fortunate humans as well.

John Woodcock



Autumn River

*You must give to the rivers
the kindness you would give
to any brother. ~ Chief Seattle*

Autumn kayak takes you
close to sister wind.
Her quick laughter
lifts you near drying reeds,
by red-wing blackbirds'
abandoned nests
quiet now these chilled days.

One hand in cold water
finds the marsh ready
for the season of rest.
Fat muskrat in cattails
sets to den-building.
You nod and paddle on.

Trees of yellowed leaves signal
to yield for a fallen branch.
This artery of water feels alive
around your thin floating shell.
You coast like a seed pod
trusting brother river, and
sister wind brings you home.

Jean Biegun

*Jean's poem Spring Palette will
be in the 2010 Wisconsin Poets
Calendar. Both Jean and
Kathryn Gabl have poems in the
2009 and 2010 editions avail-
able at LaDeDa Books & Beans in
Manitowoc.*

Give Me Hair, Lots of Hair, Long, Curly Hair . . .

As with birds, the classification system of mammals has been challenged from time to time. In the 1980s, J. D. Smith, a biologist, suggested that the megachiroptera or big bats (like flying foxes or old world fruit bats) evolved along separate lines from the bats we are familiar with in this area, the microchiroptera, or small insect-eating bats. As evidence he noted anatomical differences in skeletal shoulder structure and the presence/absence of a claw-like thumb.

This was followed by John Pettigrew's suggestion that the megachiroptera seemed to resemble the flying lemurs. Pettigrew showed that flying foxes used visual or neural pathways to the brain thought to be unique to primates. However, mitochondrial DNA evidence subsequently showed that all bats, both mega and micro, are closely related to each other, and that bats are not that closely related to the primates.

Future studies using the genetic markers that determine the relatedness of the various mammals will, in all likelihood, produce surprises just as it has with the current studies on birds. Presently, most references continue to suggest that the Order Chiroptera (meaning hand-wing), is more primitive than the Order Rodentia, and the notion that we are closely related to the bats will be left to the writers of sci-fi or the film makers of Hollywood.

Although reptiles, birds and mammals seem dissimilar in many ways, they share one very important biological thread; the reptiles provided the evolutionary origins for both the birds and the mammals. The similarities resulting from this twist of evolutionary fate can be seen even today. The birds developed from the Sauropsid/Diapid line of reptiles; however, the mammals developed from the Synapsid/Therapsid line of reptiles. The evolutionary line that ultimately gave rise to the mammals began to separate about 240 million years ago before the dinosaurs



Therapsids lived over 250 million years ago, during the late Permian period.

reached the height of their influence. At this time, a group of reptiles called the Pelycosaur emerged, and although they were only around for 40 million years, they gave rise to the Synapsid/Therapsids. These mammal-like reptiles are considered to be the

ancestors of the present day mammals; when illustrated, they look like a cartoon of a pit bull made to look like a reptile. The reptilian characteristic of legs affixed at right angles to the body, which makes reptiles like the alligator clumsy on land, was reorganized for walking, giving the animal the anatomical form from which the mammals diversified. Anatomical and physiological adaptation of this early reptile ultimately resulted in the animal bearing the characteristics we associate with mammals: hair, skin with glands and ultimately mammary glands fashioned for nurturing the new born and young, and the ability to regulate body temperature using only internal mechanisms. It wasn't until about 50 million years ago that these animals became the present day

Flying lemurs

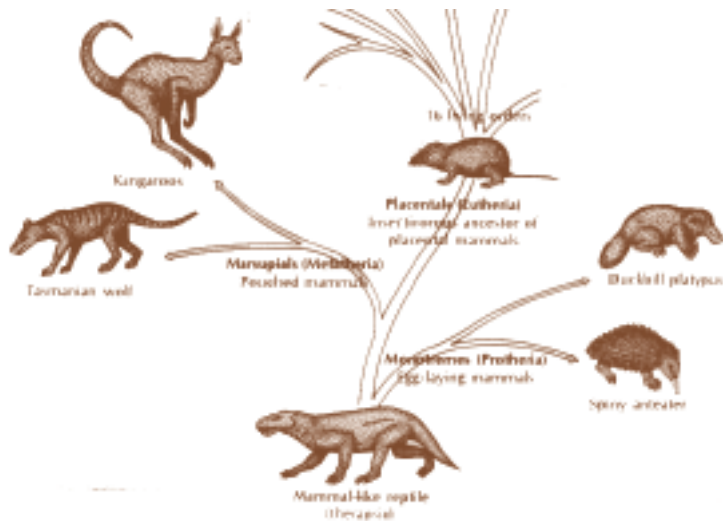
The flying lemurs, including the Philippine flying lemur, *Cynocephalus volands*, and the Sunda flying lemur, *Galeopterus variegates*, are the only living members of the Family Cynocephalidae. As the name implies, they are capable of flight, but they can only glide like our flying squirrel, *Glaucomys sabrinus*. Flight in these animals is accomplished by using a patagium, a flap of skin between their front and hind legs. When they spread their legs, the patagium, which is also attached to the tail, acts like a fixed wing, permitting the animals to glide up to 100 meters or about the length of Lambeau Field.

Calling them lemurs is incorrect, as the flying lemurs belong to the Family Euarchonta, from which the tree shrews have evolved. As we have found, common names create problems because they lead to misunderstanding or mistaken identity. Lemurs, in reality, are primates that live in Madagascar and the Comoro Islands (recently made famous when an Airbus tragically landed in the Indian Ocean, instead of on the runway, with only a 14 year old girl surviving). The flying lemurs, however, are indigenous to the Philippines, living in coconut, banana and rubber tree plantations, and the tropical rainforests of SE Asia, where the Sunda flying lemurs are found. These mammals are fairly large weighing two to four pounds, and are 14 to 17 inches in length. Because they are nocturnal and do not use echolocation, they depend on their very large eyes to guide them to their food.



Although their tooth arrangement suggests that they are carnivores, they dine only upon fruit and flowers. Their appetite for fruit is troublesome to the local farmers—because of the flying lemurs' misdeeds, they are destroyed much like we destroy the rabbits and deer that invade our gardens. Some of these hunted animals are eaten as a delicacy; their fur is fashioned into hats worn by the natives.

These animals are placental in their reproduction, giving birth to very underdeveloped babies that are cared for by the mother in a pouch (similar to the pouch used by the marsupial mammals). This pouch is made by folding the tail and its attached patagium under the belly and close to the mammary glands. Development is very slow, reaching adulthood after two to three years of parental care, proportionally similar to the time required by human offspring.



mammals, which include the three Subclasses; the Monotremes (egg laying mammals), the Marsupials (pouched Mammals such as opossum) and the Placentals (Eutherians or placental mammals). Each of these Subclasses provides an abbreviated history of the evolution of the reptile/mammal animal to the present day mammals, including their unique reproductive strategies.

Mammal watching has not been a big attraction at Woodland Dunes, mostly because of their secretive behavior and nocturnal life style. Even if someone were to observe a mammal such as the river otter or long-tailed weasel, the likelihood of others finding this individual would be slim. Although birds can fly, their behaviors are much more visi-

ble; as a result, bird watching is usually rewarded by a second or by multiple observations. If you spend as much time in the field as Woodland Dunes teacher-naturalist Dick Luchsinger does, the rewards of mammal observation can be great. You may see the red and gray foxes, coyote, raccoon, skunks, opossum, weasels, moles, bats, squirrels, other rodents and the ever-present white-tailed deer. Not surprisingly, there are many mammals we know must be present that have not been seen and recorded. Many methods used to record the presence of a mammal require that the animal be sacrificed: snap traps, pit traps, drowning and shooting. Woodland Dunes is unwilling to employ such measures just to record mammals' presence. However, armed with the new surveillance recording technology and an army of volunteers (your observations are welcome), we will fill in the gaps in our catalogue of mammals. But, I am sure that it will be Dick Luchsinger who will be the first to record the gray wolf at Woodland Dunes or in Manitowoc County.

"Hair, long beautiful hair" may be the showpiece of the musical Hair—and of mammals, but the mammary glands and the ability to produce milk to fill the early nutritional needs of the offspring and the ability to maintain a constant body temperature are also important characteristics that distinguish the mammals from all other animals. Perhaps the next rock musical will celebrate one of these. But although I can imagine mammary glands being featured on billboards, I think it will be a long time before we see the rock musical Constant Body Heat.

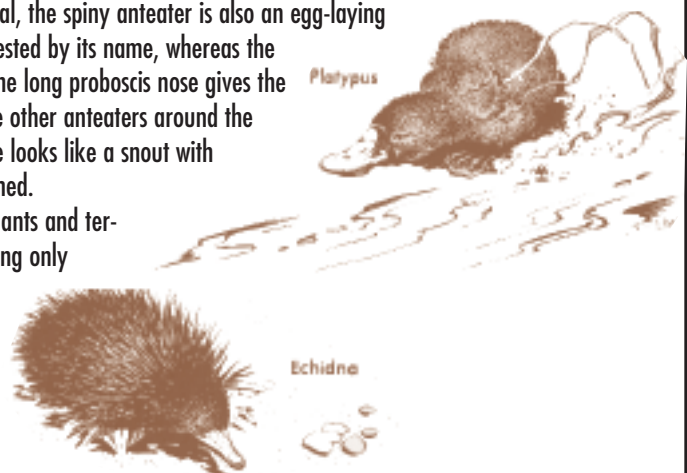
Charles Sontag IV and Chuck Sontag

Monotremes

The Monotremes, or egg laying mammals, are of special interest not only because of their unusual appearance, but because they have retained many features associated with the reptiles. In many ways they are still reptile-like, not only in reproduction, but in their physical appearance. Consider the lizard-like tongue of the spiny anteater, and the bill and tail of the duck-billed platypus. These adaptations certainly remind us of the reptile origins of the mammals. The Monotremes are found only in Australia, Tasmania and Southern New Guinea, where biological evolution has produced many surprises and enigmas. Even though their reproduction is reptile-like, they are mammals, because, like all mammals, they provide their young with milk, and their body is covered with hair. In Monotremes, milk is not released from a nipple, but instead milk is licked from body hair associated with the gland. This is much like licking sweat from the underarm hair, and, as such, is a reminder of the origins of the mammary glands, which are simply modified sweat glands.

Although the duck-billed platypus is usually thought of as the only egg-laying mammal, the spiny anteater is also an egg-laying mammal, equally interesting in its characteristics. The spiny anteater is terrestrial, as suggested by its name, whereas the duck-billed platypus is aquatic, living in streams and their banks much like our muskrat. The long proboscis nose gives the spiny anteater its characteristic face. This facial adaptation provides the spiny anteater, like other anteaters around the world, with the sensory means to find ants and termites in the soil or termite cast. The face looks like a snout with eyes and ears; certainly not pretty by any standards, but very effective for the job performed.

Although the spiny anteater is usually known for using its digging abilities to harvest ants and termites, when threatened it can dig explosively, producing a flurry of dust and dirt and leaving only a pin cushion of spines to greet the would-be predator. This pin cushion coat is also an important developmental marker for the young spiny anteater, since the appearance of these sharp quills or spines is a signal to the mother to remove the baby anteater from the modified pouch where it develops. The baby anteater is then placed in a protected environment and begins its adolescence in the real world.



Once again, selecting a volunteer of the year is a difficult assignment. Many people spend their precious time and effort to help us fulfill our mission and maintain our facilities. Our teacher-naturalists, butterfly gardeners, board and committee members, and deer hunters all deserve special recognition for their work as groups, and they put in thousands of hours in the process. Certainly, even though we exist to protect and educate about wildlife and natural resources, our greatest asset is the people in our organization. Thank you, everybody!

That said, one person really stands out: Darlene Waterstreet. She helps us with our library, data entry, organization, and much more. Darlene volunteers one or more full days each week and works on a variety of essential tasks. In addition to managing the library, in the last year she has created computer databases for our newsletters and weekly Ripples articles, entered current and past bird banding data for thousands of birds, helped to maintain our website, helped to organize our storage area (formerly known to our staff as the Black Hole), greeted visitors, and much more. Her proof-reading skills are called upon frequently, including for the *Dunesletter*. Darlene helps Woodland Dunes in a very practical and needed way, and as a result our staff is able to function more efficiently.

The cheerful attitude of our volunteer of the year gives a lift to our staff, and her hard work allows us to get so much done. Darlene is a role model for all volunteers, and our organization is grateful for her help. Thank you so much, Darlene.

Jim Knickelbine, Director

Volunteer Help Needed

Woodland Dunes has been awarded a Citizen Monitoring Grant by the Wisconsin Department of Natural Resources. The project, which will be coordinated by our staff and Tom Ward, will result in the production of a map of selected terrestrial invasive plant species for the county, so that their impacts and possible future actions to control them can be assessed. We will be asking volunteers to assist in the project, and we will provide training in the identification of ten invasive species to be located in Manitowoc County using GPS receivers. Please contact us if you can help in this very important wildlife management project—we will begin training and mapping this fall.

Butterfly Garden Volunteers

Enjoy the pleasant autumn days and meet new friends with common interests while helping keep the butterfly garden weed-free and growing. Most volunteers work Thursday or Saturday mornings, weather permitting, but once you are familiar with the garden, you are welcome to come at any time. Stop by any time to learn more.

Because the library shelves are getting crowded again, thanks in part to our generous members who donate books, with Jim's approval I "weeded" the collection, which is library talk for withdrawing some unneeded books to make space for new acquisitions. One of the criteria for removal is age, especially in the case of scientific material which may be totally inaccurate in books that are 50 years old or older! These are checked to determine whether they may have any monetary value, in which case they would be kept in a special location. But many of Woodland Dunes' older books are textbooks that have no value to collectors. Another reason for removal is that the subject matter of the book does not fit within the library's mission statement. A third group of weeded books is duplicate copies; these are kept in a working collection accessible to staff, but off the library shelves. The total number of withdrawn books was small, but it allows space for a few new acquisitions.

Other recent projects involved indexing, or, in information technology terms, building subject databases. There is now a computerized index for the *Dunesletter*, allowing staff to identify articles from all issues (all the way back to 1975) by author and/or subject. This index was begun after the death of Helen Dicke-Krivacek prompted a time-consuming search through old issues of the *Dunesletter* in an attempt to locate early articles and photos of Helen. Now any articles about a person can be found by searching for their name in the database. If that is unsuccessful, a more general search might be necessary, e.g., looking for all articles on teacher-naturalists or other categories. This works for other subjects as well, such as habitats, history of facilities, educational programs, etc. Only the index is on the computer, not the text of the articles, but because staff member Geri Berkovitz has the old issues so well organized, the article can easily be retrieved from the files.

Another index involves the entire set of "Ripples from the Dunes" articles, as printed in the *Manitowoc Herald-Times-Reporter* beginning in 1975. Again, Geri has a well-organized set of the articles, which were being accessed based on a series of handwritten subject cards. In addition to saving Geri the time needed to determine the subjects and enter them on the cards, in transferring this information to the computer standard subject headings have been used, making retrieval easier. An attempt had been made to do that with the cards, but because of the different people who have worked on the project over the years, things had gotten a little confused. Geri and I are working together to update the index when new articles are published. Now, if we can only keep it organized!

One note on the library collection involves the addition of a subscription to *Wisconsin Natural Resources*. If you are interested in reading this bimonthly magazine from the DNR, you can find it in one of the periodical boxes on top the north shelves in the library.

Darlene Waterstreet, Volunteer Librarian



Kidland Dunes

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



Mallards: The Survival Story

The traditional green-blue head coloring of a mallard duck is unmistakable. They appear nearly year-round in most of the country where there are large amounts of open water. Perhaps you have fed mallard ducks occasionally with birdseed or bread crumbs. Although the common mallard is most often considered an American bird, they are just as common in places such as Europe, India, and even places like Siberia or Russia. Often they seem to overwhelm ponds and marshes in the springtime when they nest, but mallards actually face many hardships that bring down the population.

Predators may devour the mallard eggs before they can hatch. Or the ducks may be forced to move from pond to pond because of construction or an excess of predators.

It is only because of the mallard's ability to live alongside man that it can thrive virtually anywhere.

Fall Is Coming September 22!

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

AUTUMN MALLARD
CHILLY PUMPKIN
FROST RAKING
HARVEST THANKSGIVING
LICHENS WHITE-TAIL DEER

“There's a spider on my head!”

“Get it off!” the girl shrieked.

I was with some friends at a church camp in Antigo, desperately trying to get some sleep, when the unfortunate “spider” incident happened. Her cries made me panic for a few moments too, until one of our leaders quickly explained that the “spider” was actually a daddy long-legs, and despite its sneaky wiry looks, it can't hurt you at all.

Maybe you're thinking, “But how come it's not a spider?” Let me explain:

• A spider's body is clearly divided into two parts: the head and the

abdomen. A daddy long-legs has just one, undivided section.

• Most spiders have eight eyes. A daddy long-legs also two eyes—one in front and one in back, kind of like a rearview mirror.

• Many spiders spin webs. Not so with the daddy long-legs. In fact, it even likes eating web-spinning spiders, making it a very helpful household pet.

So the next time your friend screams “Spider!” around a daddy long-legs, don't panic—take a moment to show your friend how cool this creature is.



It Is Easy Being Green... Try It!

These days you hear it on the news and from your teachers—going green makes our world a better place to live. But who says you can't have fun doing it?

1. Skip the car. The Maritime Metro Transit in Manitowoc/Two Rivers has very low fares. Biking is great exercise. Both are cool ways to see the city and hang out with your friends.

2. Carry a reusable water bottle. You can get one in any color, shape or size and make it your own.



3. Recycle common household items. There are lots of cool crafts you can make with old CDs, paper towel rolls, shoe boxes, glass jars and bottles.

4. Don't litter! Pick up after yourself and leave places better than you found them. It's the most helpful thing you can do.

Sources: Wild Wisconsin Notebook, by James Buchholz; www.dnr.state.wi.us/org/caer/ce/eek/index.html; www.britannica.com; www.snopes.com; www.nature.org/activities/everydayev.html; www.kids-going-green.com

Giant Silk Worms as Pets?

This fall we have a new project at Woodland Dunes: we are helping a local naturalist, Dale Reimer, increase the population of giant silk-worm moths (Saturniinae) in our area. Three species were targeted for this project, the luna, the polyphemus, and the cecropia moths.

The silkworm moth with which I have become a close personal friend is the cecropia. I have watched their small black, hairy caterpillars emerge from their light brown, oval eggs and then transform into yellow and green caterpillars with spiny orange, yellow and blue knobs and again into whitish green caterpillars with bright yellow, blue and red knobs. As I write this article, our biggest caterpillar is about two inches long, with the potential of reaching five inches. By the time this newsletter goes out we will have some HUGE caterpillars for you to view here at the nature center.

Why red, blue and yellow knobs, you might be asking. Were you thinking it's a survival technique? Well you're right, moths and butterflies have wonderful survival techniques—some are brightly colored like the cecropia caterpillar, which indicates the animal might be poisonous or taste bad, while others have amazing camouflage and still others use startle techniques. Adult and larval stages can look like tree bark, dead leaves, lichens on a tree and my personal favorite, bird poop. A brilliant survival strategy: if you don't want to be eaten by an animal make yourself look like its poop! (NB: doesn't work for dogs)

The adult cecropia moth employs the startle technique to dupe predators. The large round spots on their hindwings resemble big eyes that can make a predator hesitate before attacking or confuse them into directing the attack to their hindwings, allowing the moth to get away and protect their vulnerable body.

These moths are big. With a wingspan reaching six inches, the cecropia is the largest moth in North America. This can be an advantage, making them look too big to eat.



While moths make up the great majority of Lepidoptera (from the Greek: *lepido*=scale and *ptera*=wing), their brightly colored day flying friends, the butterflies, get most of the attention. Little do people know that when they look at a butterfly they are looking at the newest form of a moth.

The first record of Lepidoptera in our Earth's history is during the Jurassic Period, about 190 million years ago, when the dinosaurs reigned supreme. Butterflies, a recent offshoot of the moths, started to take advantage of the day-blooming flowers and the chance to evade the bats that hunted at night.

The reason that moth rearing projects are becoming more common is because their populations are declining. Loss of habitat and food sources, poisons, and viruses all contribute, but one of the most interesting causes of their decline is related to the fight against the gypsy moth. (To learn more about gypsy moths, see sidebar next page.) The two biological weapons used to help rid our country of gypsy moths have unfortunately taken a toll on other moth and butterfly populations.

The introduction of a tachinid fly, *Compsilura concinnata*, was the first attempt at controlling gypsy moths. *C. concinnata* is a parasitoid native to Europe. The female tachinid fly pinches its victim's body between the spines on the underside of her abdomen. With her sharp larvipositor, she injects a maggot into the wound. She often attacks the same host a

number of times. The maggot feeds on the insides of the host, eventually killing it. The maggot pupates in the host's cocoon, in the soil or in crevices in tree bark.

Adult flies emerge in 10 to 20 days. This parasitoid is a generalist, attacking more than 200 different hosts from three insect orders, including *Lepidoptera* (moths and butterflies), *Coleoptera* (beetles) and *Hymenoptera* (wasps, bees, ants, sawflies, ichneumons, chalcids) *Compsilura* was initially introduced into North America in 1906. It has been implicated in the decline of several giant silk moths. Parasitism by this particular tachinid fly can reach 81% in the cecropia moth.

The other form of biological warfare we have unleashed is *Bacillus thuringiensis* (Bt), which exists as bacteria in soil naturally. The larval stage of life is most susceptible to Bt toxicity because this is when the insects eat the most. When gypsy moth and other larvae eat vegetation treated with Btk, a toxin is released in their stomach that starves or poisons the insect. While altered forms of this bacteria are designed to manage specific insects, the general Bt is not insect specific, and has affected the populations of many moth species.

At this stage in their lifecycle my little cecropia friends are concerned with one thing—eating. I have to restock their homes daily with leaves. Some mornings you can hear an audible chewing sound coming from the caterpillars. I rest easy at night knowing they are safe in the Nature Center, away from tachinid flies, other predators and Bt. But, like every good parent, I will need to say good-by soon, sending them out into the Woodland Dunes forest where they will be rejoining the natural ecosystem. Fortunately they are already born knowing all they need to know, so my role is minor in their lives, but I will never forget my brief stint as a caterpillar caregiver.

Kelly Eskew, Education Coordinator

Gypsy Moths

The gypsy moth's native range extends from the cold Russian steppes to the subtropical shores of the Mediterranean. There its natural enemies such as parasites and diseases keep it in balance with its environment. The gypsy moth was brought to North America by Professor L. Trouvelot when he tried to breed a hardy silkworm. Between 1868 and 1869, some gypsy moths escaped when a specimen jar fell from Trouvelot's open window. More escaped from small populations growing on shrubs in Trouvelot's garden when high winds blew off protective netting. The professor notified townspeople about the accidents, but nobody thought the gypsy moth was a pest so the insects escaped. They soon multiplied in a vacant lot next to Trouvelot's home in Medford Massachusetts. The insects gradually increased in number and spread across the United States, arriving in eastern counties of Wisconsin by the 1990s.

I have heard stories of gypsy moth devastation: audible sounds coming from the falling frass (insect poop), cars sliding through stop signs from the slick road conditions, trees completely defoliated. Gypsy moths can devastate a town; their impact ripples through entire ecosystems. Most trees re-leaf by late July, but it is very stressful and can kill buds, twigs and branches. Tree growth slows down for several years and the weakened tree is more susceptible to other forest insects and diseases. They may stop making nuts, sometimes for years, and wildlife loses out on a food source that it depends on.

The bare trees expose nests and songbirds may lose their young to predators. Diminished shade from the tree results in warmer water temperatures, lowering the amount of oxygen available for aquatic plants and animals. Leaves can no longer buffer summer storms, allowing rainwater to erode the soil and lower water quality in streams. Fish and other aquatic animals suffer from stress until the trees re-leaf and water cools. These are all signs that the gypsy moth has struck an area.

Kelly Eskew, Education Coordinator

Aegolius Bird Club

The Aegolius Bird Club meets at Woodland Dunes the second Tuesday each month at 7:00 p.m. The club also makes field trips each month on Saturdays to places around our area that are rich in bird life. Membership is open to anyone interested in birds, but you need not be a member to attend meetings or to participate in field trips. For more information, call John or Julie Woodcock at (920) 683-3878.

Woodland Dunes' marsh, prairie, forest and all areas between have been surveyed for birds this summer: 1,989 individuals of 108 species were identified. There were 153 warblers of 13 species, 156 thrushes of 5 species, 113 sparrows of 6 species and 419 blackbirds of 6 species. Total numbers of warblers and sparrows were down slightly from the five year average; the numbers of thrushes and blackbirds were slightly higher.

Dry weather may account for the changes. The water levels in the swales that flow through Woodland Dunes were very low, which meant fewer mosquitoes for the warblers to eat. Low water levels during spring migration could have kept the warblers moving north. Lack of moisture could have meant less seed production for the seed-eating sparrows. Dryness could have benefited more thrushes and more cattails growing in the marsh could have been good for nesting red-winged blackbirds. There are always ups and downs, but if trends continue, we need to look at possible causes.

Mourning warbler and white-throated sparrow, both ground-nesters, are good examples of species we are watching. Their numbers began dropping when the deer population began increasing. We believe that their nests may have been disturbed by the grazing deer. By managing the deer we hope to manage for these two avian species. To date, their downward trends seem to have slowed. The numbers of other bird families seemed fairly consistent with the past years' averages.

Birds missed this year included blue-winged teal, ruffed grouse, broad-winged hawk, American kestrel, belted kingfisher, least flycatcher, eastern phoebe, yellow-throated vireo, warbling vireo, blue-gray gnatcatcher and four species of sparrows: field, vesper, grasshopper and Henslow's. Missed species could have been present but were in the wrong place at the wrong time to be located. Seldom seen species, identified this year, include great egret, yellow-bellied sapsucker, Acadian flycatcher, pine warbler and blue-headed vireo. One of the sapsuckers was seen entering its nesting cavity and the Acadian flycatcher not only was seen and heard but also "showed us where its nest was!" The total number of summer warbler species found at least once at Woodland Dunes is now twenty-five.

Each year we invite people along on one or more of the survey routes. Please call the nature center, 793-4007, during the first week in June if you would like to join us in this interesting, on-going endeavor.

Bernie Brouchoud, Environmental Educator

Canada Goose	35	Hairy Woodpecker	9	Cedar Waxwing	3
Wood Duck	8	Northern Flicker	13	Golden-winged Warbler	1
American Black Duck	1	Pileated Woodpecker	1	Nashville Warbler	1
Mallard	20	Olive-sided Flycatcher	1	Yellow Warbler	24
Ring-necked Pheasant	1	Eastern Wood Pewee	9	Chestnut-sided Warbler	1
Wild Turkey	13	Yellow-bellied Flycatcher	1	Black-thr. Green Warbler	8
Double-crested Cormorant	2	Acadian Flycatcher	1	Pine Warbler	1
Least Bittern	1	Alder Flycatcher	19	Black-and-white Warbler	5
Great Blue Heron	11	Willow Flycatcher	6	American Redstart	9
Great Egret	1	Great Crested Flycatcher	39	Ovenbird	40
Green Heron	9	Eastern Kingbird	2	Northern Waterthrush	6
Bl-crowned Night Heron	1	Blue-headed Vireo	1	Mourning Warbler	13
Turkey Vulture	2	Red-eyed Vireo	68	Common Yellowthroat	43
Osprey	2	Blue Jay	27	Canada Warbler	1
Northern Harrier	1	American Crow	42	Scarlet Tanager	1
Red-tailed Hawk	1	Horned Lark	2	Eastern Towhee	2
Sora Rail	4	Purple Martin	4	Chipping Sparrow	9
Sandhill Crane	19	Tree Swallow	27	Clay-colored Sparrow	9
Killdeer	15	Northern rough-w. Swallow	6	Savannah Sparrow	15
Spotted Sandpiper	2	Cliff Swallow	9	Song Sparrow	66
Solitary Sandpiper	2	Barn Swallow	65	Swamp Sparrow	11
Greater Yellowlegs	2	Black-capped Chickadee	37	White-throated Sparrow	3
Wilson's Snipe	1	Brown Creeper	1	Northern Cardinal	54
American Woodcock	1	Red-breasted Nuthatch	4	Rose-breasted Grosbeak	2
Ring-billed Gull	20	White-breasted Nuthatch	15	Indigo Bunting	17
Herring Gull	20	House Wren	99	Bobolink	5
Caspian Tern	1	Winter Wren	6	Red-winged Blackbird	300
Rock Pigeon	3	Sedge Wren	7	Eastern Meadowlark	4
Mourning Dove	54	Marsh Wren	12	Common Grackle	81
Black-billed Cuckoo	5	Eastern Bluebird	8	Brown-headed Cowbird	26
Great Horned Owl	1	Veery	35	Baltimore Oriole	3
Chimney Swift	6	Swainson's Thrush	1	House Finch	7
Ruby-throated Hummingbird	3	Wood Thrush	3	American Goldfinch	91
Red-headed Woodpecker	2	American Robin	109	House Sparrow	18
Red-bellied Woodpecker	7	Gray Catbird	38		
Yellow-bellied Sapsucker	2	Brown Thrasher	2		
Downy Woodpecker	10	European Starling	69		

108 Species ~ 1,989 Individuals

Native . . . and Naughty?

Now that I've convinced all my friends that native species are the answer to their gardening problems, I may have to back off a little. My garden at Winghaven has its share of oft-cursed invasive exotic plants, but I've learned that some native plants are not good garden subjects either. Experts refer to these local bad boys as "aggressive natives," and just like invasive exotic plants, they can create havoc in a carefully planned garden.

Along my driveway at the edge of the woods, the blazing autumn leaves of staghorn sumac (*Rhus typhina*) are a delight; in my perennial garden the fuzzy red sprouts are nothing but trouble. Those soft little sprouts are attached to long, rope-like roots coming from a natural stand of sumac ten feet away; no matter how often I pull them, they keep coming back.

The lovely red-twig dogwood (*Cornus sericea/stolonifera*) is even more of a problem. All winter long I admire its deep red stems, but each year I fight this amiable invader. Not content to spread into any open space by rooting its drooping branches, it seeds prolifically. Each little seedling must be pulled out, or a monoculture of red-twig dogwood will replace my ornamental perennials and shrubs. Ever so often, a seedling escapes my attention and before I know it, I have a two-foot shrub to dig out.

Shrubs aren't the only overly-eager natives. Think about box elders (*Acer negundo*): they send out an astonishing number of samaras each year, eager to grow up and produce more seeds. Although box elders provide much-needed housing and food for wildlife, they are seldom anyone's favorite trees: their weak wood has little commercial value, and branches and trunks break easily in wind.

Some trees spread by suckering. The lovely stand of quaking aspen (*Populus tremuloides*) that lines the slough at Winghaven seems determined to take over the entire property. I find sprouts coming up twenty-five feet away from the main colony. They are beautiful trees, with swaying, pale trunks and leaves that shimmer in the wind. They, too, provide food for birds and animals, and, if I wanted to harvest them, have many commercial uses, but I wish they would stop their expansion efforts.

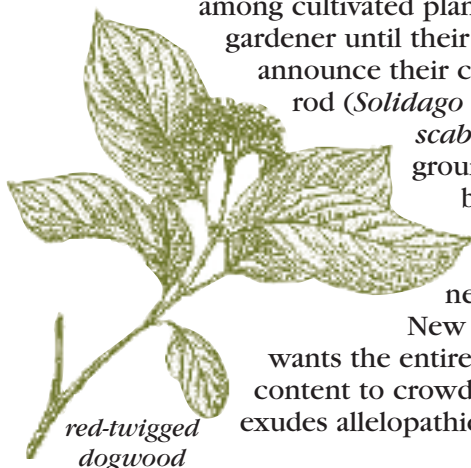
Herbaceous perennials can be insidious, sneaking along among cultivated plants, hiding from the gardener until their triumphant blooms announce their coup. Canada golden-rod (*Solidago canadensis* var

scabra) spreads by underground rhizomes as well as by prolific seeds. The

golden plumes are lovely, particularly next to the purple of

New England aster, but it

wants the entire garden to itself. Not content to crowd out other plants, it exudes allelopathic chemicals through



red-twigged
dogwood

its roots, reducing germination and restricting the growth of other herbaceous species.

Field horsetail (*Equisetum arvense*), the nemesis of the butterfly garden volunteers, also gains an advantage by emitting an allelopathic chemical. While I may have some hope of controlling other aggressive native plants, the field horsetail has been around for hundreds of years, reproducing by shoots from rhizomes, tubers and spores. The rhizomes can be 300 feet long, roots six feet deep. It's a formidable foe; most control efforts are ineffective. Shading it out may be all you can do.

Vines are often among the most aggressive of plants, rushing at top speed to the treetops and sunshine. Native vines are no less so. Think about wild grape (*Vitis aestivalis*) or Virginia creeper (*Parthenocissus quinquefolia*). They spread by rooting along their stems and by seeds. And with all their advantages for wildlife, once you have a tree killed by vines that have shaded out its leaves, you won't look at them as innocent bystanders.

I'll mention just one more aggressive native to convince you that the term native is not an automatic gold star: poison ivy (*Toxicodendron rydbergii*). Use caution in choosing plants for your garden; even native plants can have drawbacks.

Susan Knorr, Editor

Annual Tree & Shrub Sale

Woodland Dunes is again offering native, disease-resistant species, grown by reputable nurseries in our climate, and dug immediately before pick-up, for planting in spring 2010. These reasonably-priced plants are useful for landscaping, wildlife food and cover, windbreaks, timber production, and environmental screens. Our staff will provide advice on planning, planting and managing your trees and shrubs. Limited numbers of trees and shrubs are available; please order early. We're also offering specially-priced packages of trees and shrubs for landowners with smaller plots.

To receive an order form, email sknorr@woodlanddunes.com or call Woodland Dunes at (920) 793-4007. This year we will also be posting a downloadable order form on our website, www.woodlanddunes.com.

Orders may be placed anytime up to mid-March, but must be accompanied by pre-payment. Although we will make every attempt to fill your order, supplies are limited, so order early.

Plants will be available for pick-up the beginning of April. You will receive a postcard with pick-up information; the exact date will depend on the weather.



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Thank You



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In memory of Ed Krivacek and Helen Dicke-Krivacek

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Helen Dicke-Krivacek \$3,000

Honorariums

The marriage of Sarah and Bill Parry
Tom and Betsy Kocourek
The VanDreel's 50th wedding anniversary
Charles and Marilyn Sontag

Adopt an Owl

Carol and Earl Martin.

Wish List

We would like an ATV to help with construction projects and trail maintenance.

Gifts

Helen Massey
Wicked Plants for the library
Wild Ones
Begin with a Seed for the library
Pick & Save
WeCare donation (\$70.49)
Barry Pankratz
Taste of the Dunes honey: 20 jars
Bernie Brouchoud
his \$100 award as a winner of the LNRP Fall 2008 Champion of Conservation competition.
Irene Luethge
100 copies of *Color on the Land* (\$14.95 each) to be sold in the shop and awarded to TNs.
Margaret & Ray Luisier and Mary Savage
evening primrose for the berm
Glen Hanson
art table for Little Wings play area
Rob and Jody Henseler
aquariums for nature programs
Mike and Jill Merten
bird feeders and seed

Major Donations

Fred and Charlotte Alyea
\$1,000 for institutional support
Jack and Laurel Alyea
\$5,000 for institutional support

Matching Donations

Dominion Foundation (\$700)

Grants

WDNR for invasive plant mapping



This oak tree was donated in honor of Walter Vogl by the Two Rivers Historical Society.

Volunteers

Barry Pankratz

Besides thanking Barry Pankratz for keeping the Woodland Dunes' bees and extracting and bottling honey, we want to thank him for removing a large wasp nest from under a boardwalk.

Pete Stuntz

We'd like to thank Pete Stuntz for contributing his time and expertise on the Woodland Dunes finance committee.

Jenene Garey

Thanks to Jenene for organizing the sale of stuffable shopping bags to raise money for the butterfly garden.

New Members

Gladwyn Doughman
Ken & Kathy Kuecker
Suzanne Pilon

Corporate Memberships

Lakeshore Express (renewal)
M & C Dunn Properties, LLC (new)
Jagemann Stamping (renewal)
Lakeside Foods (renewal)
Maritime Insurance Group (new)
Twin Rivers Turf (renewal)
Aurora Health Care (renewal)
Investors Community Bank (renewal)

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James Seiler

Annual Fund Drive

Our thanks to the following for their donations to the annual fund drive:

Amvets Post 99	Ken and Mickey Fletcher	Louise LeRoy	Kay Schroeder
Herman Balaban	Dr. Robert A. Gahl	Margaret Lutze	Timothy and Karen Schroeder
Scott A Barner	Charles Geiger	Nic Lyons	Jerome and Shirley Scriver
Eric and Renee Baryenbruch	Mr. Dean Halverson	Earl and Carol Martin	Don and Jean Seehafer
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Gwen Braun	Ihlenfeld, Skatrud and Anderson, Inc.	Bernadette Netzer	Isobel Wilcox
William F and Helen M. Brennan	Josh and Linda Jelinek	Jim and JoAnn Noffke	Lake Woods Chapter 72
Frances Brinkman	Eleazar and Genia Kadile	Carol Nystrom	Wild Ones Natural Landscapers, Ltd.
Gerald and Nancy Buth	Ms. Rebel Kanzelberger	Modesta Olson	Paul and Jeanne Wojta
Dorothe J. Casavant	Al and Theresa Kearney	Gerald E. Peck	Roger Wykes II
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Catherine and Kenneth Daum	Mary E. Knickelbine	Roger and Janice Rezachek	Eleanor Zoer
Thomas and Judith Dokey	Susan and Jim Knorr	Roger Ringmeier	<i>(donations received between July 1 and August 30)</i>
Kurt Dramm	Debra Knudsen	Henry and Edith Rusboldt	
Michael and Christine Dunn	Karen Koebel	Herb and Dorothy Schmalz	
Robert Ferry	Janet, Jeff and Carry Kohn	Dale and Edith Schroeder	

Woodland Dunes Nature Center & Preserve: A Habitat of Global Significance

The Forested Ridge and Swale habitat at the heart of Woodland Dunes was recently designated a site of Global Ecological Significance by the Wisconsin DNR. Only a few similar habitats exist in the world. As part of the 1,200 hard-working acres that comprise Woodland Dunes, this habitat cleans our air and water, prevents flooding by absorbing excess rainfall, provides homes to thousands of plants and animals (some threatened or endangered), and offers a setting for environmental education for the future guardians of our natural environment. These fragile habitats of Woodland Dunes Preserve depend on your support for their continued existence. Woodland Dunes is not a government agency; its operation is made possible solely by membership fees, grants and gifts from people who care. The annual fund drive provides a significant part of our income. Just as every habitat at Woodland Dunes is important, so is every donation. Thank you for your consideration and support. **Please invest in your future by supporting Woodland Dunes.**



a student collects water samples

I wish to support Woodland Dunes with the following donation:

\$10 ____ **\$25** ____ **\$50** ____ **\$100** ____ **\$200** ____ **other**

Name (please print) _____ **Phone** _____

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City _____ **State** ____ **Zip** _____

Please make checks payable to Woodland Dunes and return this form with your donation to: Woodland Dunes, PO Box 486, Two Rivers, WI 54241-0486

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.

Woodland Dunes

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- \$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.

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Hours

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

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Winter • by appt. or for events

Hiking trails open year round

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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
 Manitowoc, WI
 54220
 Permit No. 448

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