Looking forward

Being the director of a nature preserve is like being the mayor of a city, except that most of your constituents are a different species and can’t articulate their needs. We have to try to interpret, through science and experience, what’s going on and how best to manage things. If the management is poor, you lose members one way or another—the human beings won’t renew the support that makes programs possible, and the other beings either leave or perish. If management is good, all sorts of living things will thrive. Generally, the better the management, the more diverse the resident population. The world is an incredibly dynamic place, and the number of interactions within the borders of Woodland Dunes at any moment is beyond comprehension. Perhaps the best thing we can do for ourselves, and for nature, is to take some time, sit outdoors, and try to be aware of all that is going on around us.

Our staff and board have been doing that, although on a different level, by re-examining our goals. In our early days, our goals could be easily defined: preserve as much land within our goal area as possible, and educate people about nature. Thirty-eight years and nearly 1,200 acres later, we believe we’ve done a good job, but also realize how much still needs to be done. In fact, there is more to do than our resources allow, so we need to focus on the most important issues, and refocus from time to time. With that in mind, we’ve developed the following vision statements to define what we would like Woodland Dunes to do and be:

• Nurture an ecologically healthy and diverse preserve that protects critical habitat for native flora and fauna.
• Build a strong community of ecologically responsible, active members through education and example.
• Develop purposeful facilities which attract, welcome, engage, and inspire visitors to appreciate and understand the natural world.
• Create a stable financial footing through a larger, stronger donor base with the beginnings of an endowment.

I think the vision represented above is balanced and attainable, and in keeping with the intent of our organization. The vision statements above were used to guide our board as we continued the process of strategic planning. As we did, the following issues were identified as areas of activity in the next 12 to 18 months:

• To increase our program funding.
• To establish an endowment that will provide additional, stable program funding.
• To evaluate our facilities and identify most needed repairs or cont. on page 4
**Coming Events**

**Story Walks**  
**Monthly, June through September**

Hike the Story Walk Trail for fun and learning. Each month, pages of a storybook will be posted at intervals along one of our trails. Combine literacy, exercise, nature and family time! Trail maps are on our website or at the Nature Center. After your walk, enjoy time in Little Wings play area and kids’ room. Sponsored by Service League of Manitowoc County.  
**June** - Yellow Birch Loop Trail, .3 miles  
**July** - Cattail Trail, .3 miles, (.6 miles out and back)  
**Willow Trail, Goldenrod Loop - .7 miles**  
**September** - Coneflower Trail, .74 miles

**Guided Marsh Tour by Boat**  
**Fridays, June 1, 15; August 17; September 7, 21**  
10:00 to 11:30 a.m. • $10 per person

Enjoy a guided pontoon trip down the West Twin River. Sit and relax as you learn about the river ecosystem and the animals and plants that make the West Twin River their home. Space is limited; registration required.

**Transit of Venus**  
**Wednesday, June 6 • Lunch, 11:00 a.m.**  
Dragonfly presentation 12:30 to 2:00 p.m.

Volunteers wanted—not to work, to be appreciated. Join us for our annual volunteer appreciation picnic. The staff will provide a cookout lunch to thank you for your hard work. After lunch, attend a dragonfly workshop. Our dragonfly expert, Ken Tenneson, has even discovered new species. Please call to let us know you are coming so we can plan lunch accordingly. All volunteers are welcome.

**The Wonder of It All**  
**Phenology for You**  
**Wednesday, June 13 • 10:00 to 11:30 a.m.**

Join Vicki Medland from UW-Green Bay Cofrin Center for Biodiversity on an exploration of phenology, the study of the timing of natural events. Learn how phenological data is collected and what phenological signs to look for, then enjoy a hike in the preserve.

**Firefly Night**  
**Thursday, July 5 • 8:30 to 9:30 p.m.**

Members: Family, $8; Individual, $4 • Nonmembers: Family, $10, Individual, $5

The day after fireworks light the sky, enjoy an encore evening light show at the Nature Center! An indoor program about fireflies will be followed by a walk to look for these amazing insects. Recommended for children seven years old and older. Registration required by June 28.

**Little Wings Wednesdays**

**Nature fun and play time for you and your little one**  
**Wednesdays, July 11, 18, 25, August 1, 8, 15 and 22**

Nature Activity: 10:00 a.m., play time to follow Fee: $2 donation per child appreciated.

Spend time with your kids this summer in our Little Wings natural play area. Start the morning with a guided nature activity, then let your little ones explore the play area or enjoy our Story Walk Trail. Nature activities are best suited for ages 3 to 7, but all ages are welcome. Registration is appreciated one week prior to week of participation. Call (920) 793-4007 or email kellye@woodlanddunes.org.

**Celebrity Bartender Night**  
**Thursday, July 12 • 5:00 to 7:00 p.m.**

Help raise funds for Woodland Dunes at Benchwarmers Sports Bar in Fox Hills Resort. A portion of each drink, all tips and other money raised from donations and raffles will be donated to the Dunes. Executive Director Jim Knickelbine, Development and Marketing Coordinator Jessica Johnsrud and Board Treasurer Troy Christiansen will be your Celebrity Bartenders. Bring your friends and join us for a great time.

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**For information, call (920) 793-4007 or check our website at www.woodlanddunes.org. Unless noted, all events are held at the Nature Center.**
Adventure Nature Race for Kids!
Thursday, July 19 • Fee: $15 per team
Check-in, 10:00 a.m.; Race Start, 10:30 a.m.; Award Ceremony, 1:00 p.m.

Teams: four children plus at least one adult. Recommended ages: 10 and up. Enjoy a physical and mental challenge as you explore the Dunes and learn about the plants and animals that make it their home. How fast will your team be able to complete the seven challenges and how much will you remember? Brains are just as important as brawn. Call the Nature Center to register your team by July 9. Limited space, register early.

Wisconsin Wetlands Association's (WWA) Wetland Gems™
September 12 • 12:30 to 2:00 p.m.

Take a visual and educational journey of Wisconsin's wetlands with Katie Beilfuss, Outreach Programs Director for WWA. Learn about 100 of Wisconsin's most important wetlands—our Wetland Gems™ These habitats represent the wetland riches that historically made up nearly a quarter of Wisconsin's landscape. Learn how wetlands help your community's economy and quality of life. Enjoy a 45 minute indoor program followed by a walk through wetland habitats. Registration appreciated by September 5.

Big Band Picnic
Saturday, July 28 • 11:00 a.m. to 2:00 p.m.

Adults, $5; children under 12, $2

Brig your lawn chairs, picnic blankets, sunscreen and friends for some music at the Dunes. Be entertained by Mad-About-Music as they play family-friendly, big band, dance band, polka and swing music under the pavilion. Brats, hamburgers, baked goods and more will be for sale, so come hungry. Hike the trails, let your little ones play in Little Wings natural play area and enjoy some good old-fashioned fun. All proceeds benefit education and land management at Woodland Dunes.

Wisconsin Wetlands Association (WWA)

Butterfly Garden Festival
Saturday, August 18 • 9:00 a.m. to 1:00 p.m.

Members: Family, $10; Individual, $5 • Nonmembers: Family, $15; Individual, $8

Learn about butterflies and the plants that attract them at this family event. Butterfly and caterpillar demonstrations, butterfly art projects, garden talks and wildflower and butterfly hikes. Join us for catching, tagging and releasing monarchs to help track population and migration. Refreshments sold.

The Wonder of It All
Adult Program: Kids in Nature
Wednesday, July 25 • 6:30 to 8:30 p.m.

Learn why getting outside with kids is important. Join Kelly Vorron, Education Coordinator, and explore the important role nature plays in children's lives. Enjoy the movie Mother Nature's Child, a look at the benefits of outdoor time. Take a tour of Woodland Dunes natural play area and kids' room, then learn easy, enjoyable activities to do with kids. Free, but donations appreciated. Please register by July 18.

The Wonder of It All
Everything Under One Inch
Wednesday, August 15 • 12:30 to 2:30 p.m.

Ever seen a woolly alder aphid? How about a mushroom 1/64” high that grows on tree lichen? Or a slime mold that’s only millimeters high and looks like an ice cream cone? Curator of Education, Matt Welter, from the Neville Public Museum will present a slideshow of his favorites found right within our own area. After the 45 minute presentation, he will lead a nature walk to see interesting, tiny, living things.

Hike the trails, let your little ones play in Little Wings natural play area and enjoy some good old-fashioned fun. All proceeds benefit education and land management at Woodland Dunes.

Owl Fest
Saturday, October 20 • 4:00 to 10:00 p.m.

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

Join us for an exciting evening of learning about owls and celebrating the migration of the Midwest’s smallest owl, the northern saw-whet. Owl Prowl night hikes, family activities, live raptor presentations by Wildlife of Wisconsin and birdbanding programs will make this an evening to remember. Parking information and a schedule will be posted on our website in September. Traveling from out of town? Enjoy a special Owl Fest rate at the Lighthouse Inn on Lake Michigan.

Getaway with the Dunes: New Orleans
November 17 • 6:00 to 9:00 p.m.

Save the Date for this year’s Getaway with the Dunes fundraiser! Join us in the Behringer Room at the Community House in Two Rivers and getaway to the Big Easy: New Orleans. Silent and live auctions, appetizers and more. Details to follow.
New to the Board
The newest member of our Board of Directors, Jon Henry, lives in Manitowoc on a 40 acre hobby farm, formerly the Vernon Shultz dairy farm. Since moving there, he and his wife Annette and their four children, ages 10 to 14, have made many changes to the property, including reforesting 20 acres, digging two ponds, converting a 1/3 of an acre to prairie, and planting a small apple orchard. About five acres now provide a pasture for beef cattle.

Jon was raised in Green Bay, where he learned to love carpentry when he worked summers with his father. While a student at Bay Port High School, he decided he could combine his interests in carpentry and athletics with a desire to help others by studying medicine and specializing in orthopedic surgery. He attended UW-Madison, where he became a member of the Varsity rowing crew when they became national champions in 1990.

After graduating from medical school, he did an orthopedic surgery residency in Syracuse and was awarded a sports medicine fellowship by The Ohio State University. A captain in the US Army Reserves from 1996 to 2008, he sports medicine fellowship by The Ohio State University.

New Eagle Scout
Elliot Christiansen completed an Eagle Scout project in which he and his troop located and plotted all of the existing parcel corner posts on the Woodland Dunes property using GPS. This valuable information will allow our staff and volunteers to navigate to those points more efficiently.

Water Quality Sampling
The Wisconsin Maritime Museum and Woodland Dunes coordinate on-going river monitoring programs for the Manitowoc River and East and West Twin Rivers. If you are interested in learning more about this monitoring project, please contact Woodland Dunes Nature Center or the Wisconsin Maritime Museum.

improvements in keeping with our vision.
• To identify the means and increase the capacity for our staff to accomplish the goals of the organization.

This process requires a lot of reflection and planning, and I am grateful that our board has been so willing to work on a strategic plan. The process of thinking critically about who and what we are will allow us to identify where we want to go, and be proactive when opportunities arise. This spring, we have two examples of this: One aspect of our wanting to have purposeful facilities that help our visitors appreciate and understand nature involves viewing wildlife in the preserve. Our first trail was a boardwalk that allowed visitors access to the amazing swamp forest near Goodwin Road that was otherwise too wet to access. Other trails followed, including another boardwalk in the marsh, trails through every habitat, and three viewing platforms at key points. This year we will carry on with that process, and also continue to make our preserve an exceptional place for wildlife viewing, especially birds.

First, we will be installing a new driveway along Woodland Drive to access a small mowed parking area at which we will build a raised viewing platform, thanks to a donation made in memory of Juan Ott by his family. Our good friends from the Grace Congregational Church Appalachian Service Project will build the platform. We really appreciate the help we have received from Pastor Kim Henning, Wade Guza, and the adult leaders, as well as the work of the 40 young people who help us build in preparation for their trip later on to help those in need with home repairs.

Second, thanks to a generous donation from and in memory of members of the Alyea family, we will be building an elevated viewing tower at our headquarters, to allow viewing of wildlife in the marsh and on the West Twin River. The first level will be ramped and accessible to all, and will overlook David's Pond. The upper level will be accessed by stairs and will look over the marsh. We think this will be a very attractive addition to our facilities that will be popular with visitors and reveal to them more about the wonderful habitats of our wetlands, and the wildlife that inhabits them. We are excitedly looking forward to these projects.

One last bit of good news. Thanks to grants from the Wisconsin Association of Independent Colleges and Universities and the James E. Dutton Foundation our staff will increase significantly with the addition of three college interns. They will be helping with a multitude of tasks, from education to research to preserve management. We look forward to their joining us, and helping to improve our programs.

As always, thank you all for your help. Here’s to an exciting summer!

Jim Knickelbine, Executive Director
Wild Animals in Need of Help

General Guidelines for all wild animals: Observe First, Act Second
A baby animal needs help if it is bleeding, flies are swarming, it is crying, it has diarrhea, it is injured in any way, or it is in immediate danger. If you are unsure if it needs help, cover it with a laundry basket or box to keep it from leaving the area until you can get answers from a licensed wildlife rehabilitator.

Questions a wildlife rehabilitator will ask
When did you first observe the animal on the ground or in trouble? Can you see a nest? Are there other babies in the nest? Have you seen an adult by the baby? If it is an older baby, is it following pets or people? If it is a mammal, is it crying or biting? If it is a baby bird, does it have feathers or can you see skin, and where? Does it have tail feathers? Are they short or long? Is its mouth open, is it peeping? If the bird has feathers, is it hopping around or has it stayed in one spot? If you are sure a baby animal needs help, observe it carefully before picking it up. Pay attention to its appearance, its behavior, where it was found, and how it was found (e.g., lying on its back, under a cat's paw, tangled in string).

Do not handle any wild creature without gloves. Even young animals will bite if frightened. Human scent will not keep a wild mother from her young, but it could make the young vulnerable to predation by dogs and cats which are unafraid of humans and human scent.

Educate your Children
Educate your children to respect wildlife and the space we share, and encourage them to observe wild animals without trying to catch or touch them. Make sure they know to tell you right away if they find an animal they think is injured or alone.

Unwanted Wild Animals?
Please do not live trap animals without consulting a wildlife rehabilitator who is familiar with the natural history of the species. Live trapping is not humane when it removes adults from their territory or their young. Babies will die without their mothers. Adults will try to return home, just as you would. If they don't make it, another of their species will take their place. Habitat modification works much better in the long term.

Don’t “Do It Yourself”
Please—don’t attempt to feed injured or orphaned wildlife or to clean or bandage any wounds; instead, get the animal to a licensed wildlife rehabilitator as quickly as possible. Injured and orphaned wildlife need professional care from experienced, licensed wildlife rehabilitators. It is not enough to feed them, they must be given the proper nutrition, using the right technique and the right amounts for their age. In order to survive after release, they must be raised with their own kind and properly imprinted on their own species. They must know the song of the lark, or the territorial hoot of the owl, the language of the squirrel’s tail—and they can only learn these things from their own kind. Before release, all wild creatures must be able to recognize and find shelter, recognize and procure food, recognize and avoid predators, socialize and interact with their own kind, be strong, healthy and acclimated to the elements.

If you truly respect wildlife, please contact a wildlife rehabilitator as soon as possible after encountering an injured or orphaned wild creature.

Susan Theys, Wildlife Of Wisconsin

If you are interested in working with wildlife and working for the community, please email WOW@tm.net or contact Susan at (920) 732-3918.

If you find a wild animal in need of help you can contact WOW at (920)-323-5609. This is a pager number. You will be asked to leave a message and a member of WOW will call you back with instructions.

Please do NOT bring injured animals to Woodland Dunes. We can not legally accept them. Instead, call WOW.

Those Darn Deer
As we have learned all too well at Woodland Dunes, deer populations in disproportionate numbers have a devastating effect on ecosystems. When John Berry moved to northwest New Jersey in 2003, he began birding in a large natural park in the South Mountain Reservation. He noted that the ecosystem was badly damaged, which he attributed to the large white-tailed deer (Odocoileus virginianus) population. At the time, the deer population was in excess of 200, although biologists had determined that the area could support only 45 deer. By 2008, the population was estimated to be about 400 deer. At that time, marksmen were brought in, and almost 300 deer were removed, and, at a later date, another 83 were removed. The following spring, the plant life began to flourish. By the summer of 2010, John noted that yellow-billed cuckoos (Coccyzus americanus), indigo buntings (Passerina cyanea), rose-breasted grosbeaks (Pheucticus ludovicianus) and scarlet tanagers (Piranga olivacea) began to reappear in the area. Because of the overgrazing of the deer, plants important to the lives of these birds had been removed from the landscape, and could no longer support the survival needs of these birds.

Invasive Earthworms?
When the glaciers that once covered our present area retreated, the soil was devoid of earthworms. In the absence of worms, a fungus-based form of aeration and decomposition characterized by deep leaf litter developed in the soil. Then nightcrawlers (Lumbricus terrestris) and smaller red worms or beavertails (Lumbricus,settlers) were introduced by European settlers. They consume much more leaf litter than the native species. Ovenbirds are adapted to the plant life associated with this deep leaf litter; its removal affects them greatly. (See article on page 8) Interestingly, other ground nesters like the hermit thrush (Catharus guttatus), black and white warbler (Mniotitta varia) and veery (Catharus fuscescens), have shown no similar decline correlated with earthworm activity. Perhaps nest location or construction provides an advantage to these species. Other victims of this worm invasion include salamanders, and forest-floor plant species such as the trillium (Trillium grandiflorum), Solomon’s-seal (Polygagenum biflorum) and bristly sarsaparilla (Aralia hispida).

Chuck Sontag
Professor Emeritus, UW-Manitowoc
In the early part of the past century, the old Two Creeks settlement burned to the ground. With the supply of eastern hemlock (*Tsuga canadensis*) for tanbark all but gone, there was no reason to rebuild, and the settlement was abandoned. No one cultivated the fields and orchards, and the woods grew up haphazardly, concealing the ruins.

In the late 30s, Winghaven was built on this land, a little to the south of the old foundations. A few acres surrounding the house were landscaped, but the wild woods continued to grow, each year reaching higher, each year closing in on the house. As I wander about in the thickening woods, I often find enigmatic reminders of the old settlement and Winghaven’s previous owners.

Most of my discoveries only provoke questions, but occasionally there are welcome finds. On the edge of the slough, near a deer trail through the woods, I found a pile of stones, the mason’s discards from the walls and chimney of the house. They have the virtue of matching the house walls and make handsome retaining walls. But they certainly aren’t original to the property; the rocks I find here while gardening or walking on the beach are glacial deposits, varied, rounded and, for the most part, small.

The stones used in the house are weathered dolomite, a popular building stone named for William Lannon, the founder of the Wisconsin town that was an early center for quarrying. These are more varied in shape than the horizontal cut you see most often. Their uncommon shape suggests they were custom cut. Their appearance reminds me of houses designed by Ephraim architect William Bernhardt, who loved working with local materials. I have been trying to find evidence that he designed Winghaven, and this is a clue that he did.

Tiny, indistinct fossils are visible on many of these stones, a reminder of their origins at the bottom of the immense tropical sea that once covered our area. The Lannon stone we see accenting so many houses has a long history. Much of it comes from outcroppings of the Niagara Escarpment, the 650-mile sickle-shaped cuesta—a ridge which has a steep escarpment on one side and a long gentle slope on the other—that runs from the northeastern United States across southeastern Canada, and then southward north and west of Lake Michigan to southeastern Wisconsin. It underlies two-thirds of Manitowoc County, mostly in the north-central and west-central parts of the county. When we think of the Niagara Escarpment, we think of the part that is exposed in the cliffs of Door County and in places like Maribel caves, but in Manitowoc County, much of this huge geological feature is buried by glacial deposits, with only an occasional outcropping indicating the underlying rock formation.

The rock forming the escarpment was originally deposited as lime mud on an ancient sea floor about 430 million years ago. The words “tropical sea” bring to mind sandy beaches, gently waving palms, and lush undergrowth, but these seas were surrounded by very little life. For time out of mind, the bare soil eroded, washing into the sea, where it combined with the calcium carbonate of the ocean’s tiny shells and other life forms to create a limestone layer. Later, magnesium replaced some of the calcium in the carbonates, slowly forming harder sedimentary strata. When the sea retreated, erosion increased, wearing away the underlying shale and leaving the weather-resistant cap of dolomitic rock. The physical evidence we see today is the Niagara Escarpment, the shore of that ancient sea.

Most of the people who could have answered my questions about Winghaven and its construction are gone, but for once, I had someone to ask. Years ago, when I first moved here, Bernie Brouchoud, Woodland Dunes’ environmental educator, said he knew where the stones used in the house came from. Busy with remodeling, I filed the information in the back of my mind, but when the question arose, I sought him out.

And indeed, he knew exactly where to send me in my search, since the stones had been quarried on property he owned. Armed with a page from a plat map and warned against poison ivy, we headed out of Mishicot, turning north on a winding road. Once past a scattering of houses, we looked to the east and saw, paralleling the road, a low bluff of weathered dolomite.

We scrambled through the woods to get a better view. No poison ivy was visible, instead we waded through a huge bed of trout lilies (*Erythronium* spp), their mottled leaves already greening in the pale spring sunlight. There it was, the source of our stones. Just like the stone here at Winghaven, the low bank of rock displayed the remnants of tiny fossils, their features blurred by centuries of weathering.

And what a history these stones had, once the shore of an inland sea, weathered by unimaginable ice age winters, crushed down by glaciers, covered by glacial till, exposed by gentle rains and flowing water, then quarried, moved a few miles, and finally shaped to build this house. It’s a dizzying thought.

Susan Knorr, Editor
Rain-Crows

Because they are very secretive, cuckoos are much more often heard than seen. Their songs can be heard at any time of the day or night. They frequently sing before rain storms, so they have been given the colloquial name of “rain-crows.”

Two species of cuckoos can be found in open woodlands through most of the eastern United States. Both are about robin-sized, but slimmer, with olive-brown upper parts, whitish under parts, and long tails. The yellow-billed cuckoo has a more southern distribution than the black-billed cuckoo. In southern Wisconsin the two species are about equally common, but in the northernmost part of the state, the black-billed is the only cuckoo. Both species winter in South America.

Their names describe one field mark that distinguishes the two species. In the yellow-billed cuckoo, the lower mandible of the bill is mostly yellow, a narrow ring around the eye is yellow, the outer tail feathers are black with large white spots, and the longer feathers of the wing are rusty brown. The black-billed cuckoo has an all dark bill, it has a red eye-ring, the outer tail feathers are grayish with narrow white tips, and their wings are entirely olive-brown.

The two species can also be separated by their songs. The song of the yellow-billed cuckoo is a long series of guttural “cuck” notes that slows noticeably at its end. The black-billed cuckoo’s song consists of groups of two to five more mellow “coo” notes repeated at intervals that vary from a few seconds to several minutes. The songs of both species are ventriloquial, so the singer is hard to locate.

Their European relatives are brood parasites like cowbirds, but American species of cuckoos usually build their own nests. A cuckoo’s nest is a flimsy platform of sticks, lined with rootlets, dried leaves, grass, or ferns, usually built on a horizontal branch against the trunk of a tree. Up to five bluish eggs are laid. Incubation starts after the first egg is laid, so the eggs hatch several days apart, each nine to thirteen days after it was laid.

The black, nearly naked nestlings are fed by regurgitation. They leave the nest in seven to nine days and climb about in the nest tree. They fly about two weeks after hatching.

Cuckoos feed largely on insects, but they also take other invertebrates, bird eggs, small vertebrates, and fruit. They have a preference for hairy caterpillars, and may become numerous where there are caterpillar outbreaks. Cuckoo populations have declined in recent years, perhaps because of the effects of pesticides.

Cuckoos arrive in their summer homes when the trees have nearly finished leafing out. They spend most of their time among the leaves, where they move slowly, and remain inconspicuous. They leave for the winter well before the leaves fall.

Seeing a cuckoo is a rare treat. But from late spring to mid-summer, their voices may be heard from our forests. Listen for them when rain is predicted.

John Woodcock
Records are Made to be Broken: Phenology at its Best

"Records are made to be broken.” I think this old sports adage is attributed to baseball, where every measurable part of the sport is reduced to a number. And, of course, if someone establishes a record, someone else will try to come up with a better record. But not all records are a measure of performance. Records may be used to keep track of change, and provide tools to establish cause and effect. This is the purpose of records kept on plants and animals found at Woodland Dunes. Our extensive bird records can provide a great deal of information.

Bird record keeping in Wisconsin began in the early 1800s, but consistent efforts began in earnest with Ludwig Kumlien, Ned Hollister and A.W. Schorger in the mid 1850s, just as Wisconsin received its statehood. They collected and/or documented between 357 and 365 species of birds by the beginning of the 1900s. The culmination of their work in 1900 was the publication entitled simply The Birds of Wisconsin.

Their studies describe the early methods of establishing records, which were quite different from our practices today. Much of their work was collecting specimens, nests and eggs, seemingly with little regard as to how this would affect the birds being studied. On one winter outing, Kumlien describes skewering a Western grebe in an area of open water on Lake Koshkonong with a pitchfork. That specimen was given to the Oshkosh Museum. Interestingly, even birds they declared as very rare were collected with great abandon.

Today, bird record-keeping is the province of individuals, academic institutions and even governments. The findings are submitted to a large array of agencies including the Christmas Bird Count, Breeding Bird survey, each state’s Breeding Bird Atlas projects, feeder counts and eBird (Cornell University and the Audubon Society). These records, collected by both local observers and those around the world, are made available to everyone with an interest in birds who has a computer. Because of the availability of these records, interpretation of the data is not just restricted to those collecting the records.

Record-Keeping at the Dunes

Woodland Dunes is a nature preserve and an educational resource, but it is also much more. For over a half a century, Bernie Brouchoud, cofounder and first director of Woodland Dunes, has amassed bird records from his bird banding activities, Christmas Bird Counts, summer bird surveys and his phenology records. This 50-year time period is equivalent to one third the length of the bird record-keeping in the state of Wisconsin. And, with enormous effort and care, Darlene Waterstreet has entered Bernie’s valuable banding records into the Fish and Wildlife’s database system. Now, they are available to everyone.

One of the very first uses of Bernie’s banding records was to alert the state’s birding community to the fact that the saw-whet owl (Aegolius acadicus) is not a rare or once in a lifetime find, as was originally thought. Using his records dating from the early 1960s, Bernie showed that the bird was, in fact, a fairly regular visitor to the Lake Michigan lakeshore. One of my first birding experiences at Woodland Dunes was an evening in mid-October, huddled near a woodpile, waiting for the magic moment to happen: the appearance of the saw-whet owl. Bernie’s work has shown that records are also made to be corrected, not just broken, since the owls were always here, but simply had not been seen or recorded.

Evidence of Change

The graphs below show some of Bernie’s observations of grassland and woodland birds. Sadly the picture for these birds isn’t as pretty as that for the saw-whet owl. The populations of many birds show a decline over the past several decades. Although Woodland Dunes is preserving more and more important habitats, the decline has continued. However, it isn’t just Woodland Dunes where declines have been noted. Bernie’s records reflect findings from other parts of the country, and in many cases, around the world. Since the end of World War II, records show that songbirds are declining, especially in eastern US. In fact, declines of many species of birds by as much as 90 to 95% have been noted by some observers. Many of these are neotropical migrating species, which are affected by habitat destruction in their wintering grounds in tropical forests. The birds affected include flycatchers, vireos, warblers, tanagers, thrushes, sparrows and blackbirds.

Just as devastating as tropical forest destruction are the changes to the summer nesting landscapes. Habitat...
fragmentation has had an enormous impact on many birds’ populations, especially affecting their ability to reproduce; it greatly increases the opportunity for brown-headed cowbirds (*Molothrus alter*) to parasitize the nests of these impacted species.

A concept that we are only now beginning to understand is that “home” for birds is much more complex than human homes, with their kitchens, bathrooms, bedrooms and other living and recreational spaces all part of one structure. For birds, “home” is often spread out over large areas, with many rooms and spaces organized in ways we only partly understand. When we interfere with this complex of living spaces, as fragmentation does, it is equivalent to separating our home into pieces with rooms separated on different sides of busy streets or rail corridors. And, if we extend our concept of home to include our work place and shopping places, fragmentation is equivalent to removing the bridge or roads we use to get to these other places. This would make living enormously difficult for us. For birds, habitat fragmentation threatens their very survival.

In addition, many changes have occurred to agricultural lands and their surrounding spaces. The conversion of farms into urban environments is just one example. Even subtle changes in agricultural practices, such as the timing of harvests, can have an enormous effect. When there is an early first cutting of hay, grassland birds are unable to fledge their young before the hay is cut. This, in part, explains what has happened to populations of eastern and western meadowlarks and to bobolinks (all blackbirds).

### Unseen Changes

Interestingly, not all habitats that are altered look different to the untrained eye. The decline of the ovenbird (*Seiurus aurocapilla*) seems surprising, since the woodlands in which it nests appear unchanged. The change is underground, where introduced European earthworms have exerted their influence. The main culprits are nightcrawlers (*Lumbricus terrestris*) and smaller red worms or beavertails (*Lumbricus settlers*). Although introduced with the first European settlers, their effect is only now being realized. Logging practices and fishermen that dump their unwanted bait add to the spread of the European worms. These hungry European worms consume much more leaf litter than native species. (see page 5)

Herbaceous plants that require deep leaf litter are no longer able to live in these areas; plants that are important to the ovenbird are being replaced by grasses and sedges. Without the cover of broad-leaved herbaceous plants, ovenbird nests are more easily found by predators, including the brown-headed cowbird. And without thick leaf litter, the insects that usually live in these landscapes are no longer present, leaving young ovenbirds and others that require these insects for their dietary needs struggling to survive.

### Those Pesky Non-natives

Another change that has directly affected bird populations is the introduction of non-native plant species. They have very few insect pests, which is one of the reasons they were selected in the first place. Because they don’t attract insects, birds that depend upon insects for their diet suffer, or simply go elsewhere. Biologists and ecologists suspect several things are happening. Usually, plants and animals co-evolve, thus have time for each to develop the tools to take advantage of the other. Plants look for help in pollination and sometimes seed dispersal, but do not want to be eaten. The insect looks for food, but doesn’t want to get poisoned. Because the native insects haven’t had the time to adapt to these introduced plants, they simply avoid doing business with them. In Europe, common reed or phragmites (*Phragmites* sp.) supports the lives of over 170 species of insects. In the US, only about 5 species of insects are associated with phragmites.

### Proceed with Caution

Interpreting the data obtained from Bernie’s records and those of others is complicated. It’s tempting to seek a one-size-fits-all approach, but this is bad science. Each record has its own story to tell, and we must carefully search to find that explanation.

We hope these records will alert us to areas of concern, and help us understand what is happening, and what the future will bring. When our records are incomplete, we may need additional records to reach true understanding. Perhaps Yogi Berra had it right all along when he said, “Congratulations, I knew the record would stand until it was broken.”

Chuck Sontag
Professor Emeritus, UW-Manitowoc
**Education Update**

Woodland Dunes offers many different educational opportunities besides the school field trips we are known for. Visits to retirement homes, public programs at various venues, after school programs, and family and adult education programs are also an important part of the Woodland Dunes education mission. In the first four months of this year, 1238 people took part in a Woodland Dunes program.

Despite the lack of snow and unseasonably warm March, it was another successful year for Woodland Dunes' Winter World and Maple Syrup programs. 360 school children visited the nature center and learned about winter and plant ecology and forest ecosystems.

The success of our programs is demonstrated by the following comments we received.

**From students:**
A third grade boy commented to one of our teacher-naturalists: “We learned more at Woodland Dunes in one day than what we learned all year at school.” Though we suspect this is not true, it was nice to hear.

In a fourth grade girl’s letter: “I think this is the best field trip I’ve had so far. That was the first time I’ve ever walked in a woods.”

**From teacher evaluations:**
“Teaching a child not to step on a caterpillar is as valuable to the caterpillar as it is to the child.” This statement beautifully encompasses what Woodland Dunes is about. Certainly we focus on protecting and teaching about the animals, plants and ecosystems they create but we are also here because of and for the people.

Kelly Vorron, Education Coordinator

**Living a long, full and meaningful life**

I am currently reading *The Longevity Code*, a book by Dr. Zorba Pastor. It is filled with examples of people who not only live into their golden years but continue to lead meaningful and productive lives. A lot of research has gone into examining the factors that play a role in life span. Dr. Pastor calls them “longevity boosters” and “longevity busters.” While reading the longevity boosters section of the book, my mind continued to turn to Woodland Dunes.

According to Dr. Pastor, two building blocks of a long, sweet life are not related to age. They are attitudes and actions that transform our lives: lifelong learning and active involvement—two things Woodland Dunes as an organization offers to people in and around our community.

**Lifelong learning**

Numerous studies show that education is a crucial prerequisite for longevity. Through family and adult programs, Woodland Dunes offers monthly opportunities for learning about the world around you. Volunteer opportunities through our education program are another great avenue to learning. Our group of teacher naturalists goes through training to learn the materials and then master it through teaching the kids that visit the preserve. The volunteers that I have met in my six years are some of the most interesting and well-lived people I have met, definitely a group of life-long learners.

**Active involvement**

Dr. Robert Butler author of *Aging in America* and founder of the National Institute on Aging has found that people who live the longest and maintain the most satisfying lives tend to have a sense of purpose. They are driven to do things, leave their mark and positively influence people’s lives. Many of the volunteers at Woodland Dunes are leaving their mark, whether it’s through the gardens they create and care for, the children they teach, the visitors they make feel at home, the maintenance tasks they perform or the time and financial contributions they have made to keep the organization moving forward.

A wonderful long-time volunteer is making a move to a different area of Wisconsin. As a going away present she gave us a plaque stating: *Teaching a child not to step on a caterpillar is as valuable to the caterpillar as it is to the child.* This statement beautifully encompasses what Woodland Dunes is about. Certainly we focus on protecting and teaching about the animals, plants and ecosystems they create but we are also here because of and for the people.

**Volunteer Opportunities**

*If you are interested in volunteering, contact the Nature Center at (920) 793-4007.

Butterfly Garden Volunteer: Help maintain the butterfly garden and surrounding area. Spend time among the birds and butterflies while helping to create habitat. Take your frustrations out on those annoying weeds. Gardeners meet Tuesday, Thursday and Saturday mornings but once you know the routine, you are free to come out any time.

Teacher-Naturalists: Spring, summer, winter or fall, we can find a job for you! If you have an interest in the natural world and enjoy working with kids contact Kelly. Training provided.

Front Desk Volunteers: Greet visitors and orient them to Woodland Dunes. Week days and weekends are available. We’ll show you the ropes.

Special Event Help: Parking, taking admission, kids’ activities, serving food. You’ll enjoy meeting all sorts of interesting people.

Maintenance: Help with various jobs at the Nature Center and around the Preserve. Work inside or out, and be sure your efforts will be appreciated.

Kelly Vorron, Education Coordinator
Kidland Dunes
A Dunesletter page for kids and kids-at-heart! By Belinda and Teresa Zoller

A New Season is Coming...
Nine years ago we (Belinda and Teresa) made a newsletter all about animals and shared it with family and friends. When we showed it to Jim Knickelbine, he saw the potential for our work to be a regular feature in the Dunesletter, and soon the “Kidland Dunes” page was born.

Today, we’re about to embark on a new season: out-of-state and at college! We’ve learned a lot about nature and how to write better articles since that first issue, and we’re now proud to pass on that opportunity to our two youngest sisters, Zipporah and Eliora. They will be your new Kidland Dunes authors. Thank you, readers, for your support and faith in us!

Moth or Butterfly… Which Is It?

It is always so exciting to find a butterfly and watch it fly, or even just rest. But wait… could it be a moth? Let’s look closer…

Wings: If you gently touch either a moth or a butterfly, a powdery substance will rub off on your finger. Those are actually powdery scales! But one thing that’s different about them is that moths tend to open their wings and spread them out flat or keep them “tented” down their backs, so the wings cover the abdomen. But when a butterfly is at rest, it usually closes its wings and holds them upright and together above its back. Also, most moths have a frenulum, barbs connecting the front and back wings together.

Color: Both can be colorful, but moths do tend to be plainer, duller.

Activity: Moths tend be nocturnal (active at night), while butterflies are often diurnal (daytime is their favorite).

Antennae: They both have antennae, but moths’ usually are feathery while butterflies’ are “clipped” and smoother.

Size: In general, moths are smaller. Still, there are exceptions, as proven by the colorful cecropia moth (yes, moth) – bigger than any butterfly we’ve seen, it was relaxing outside our garage one early evening!

Summer days are long! Help the sun RISE and SET.

Observing the Sun… Try It!
The closer we get to the summer solstice on June 20, the longer our days get as our northern hemisphere (the part of the earth where Wisconsin is) spends more time hanging out in the sun’s light. Watch a sunrise and/or a sunset in June, July, and August. How early is the sun rising? How late is it setting? Do the days seem to be getting shorter after a certain point?

Sources: www.loc.gov, Wild Wisconsin Notebook by James Buchholz.
Summer Bird Survey Plans

The eleven routes of the annual summer bird survey at Woodland Dunes Nature Center will be run as usual. However, this year we will do something different. We will attempt to do some, if not all, of the routes twice and at different times of the day. This will be a test of our accuracy in counting the summer birds.

During late spring and early summer birds are very territorial and usually will not tolerate other males of the same species encroaching on their territory. I have noticed that some males feed together and are not bothered by the nearby birds. One day, in early June last year, I saw three male robins feeding in the same spot. A few minutes later I saw two male towhees feeding together.

Studies have shown that unmated birds may be common and that they will not move into a territory unless something happens to the existing male. Some have called these birds floaters, others have called them a second population.

During our summer bird survey, well over 80% of the birds are identified by song. This could mean that the birds that are not on territory, and have no reason to sing, may not be counted. More time will be spent this year to observe this possible situation.

Because of the earlier than normal season we may begin the survey earlier this year.

Bernie Brouchoud, Environmental Educator

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. Membership is open to anyone interested in birds, but you need not be a member to enjoy meetings or field trips. For more information and field trip details, call John or Julie Woodcock at (920) 683-3878.

Field Trips

- June, July, August  (No field trips)
- September  15, 8:00 a.m. Meet at the UW-Manitowoc parking lot to carpool to Fischer Creek, Kingfisher Farm, and Cleveland to see early fall migrants.
- October  (No field trip due to Owl Fest)
- November  10, 8:00 a.m. Meet at Manitou Park to see late fall migrants there and at Evergreen Cemetery.
- December  (No field trip due to winter bird counts)

Adopt an Owl

Adopt a saw-whet owl that was caught, banded and released at Woodland Dunes. Receive a certificate of adoption with the band number of your owl, a photo of a saw-whet owl, an information sheet, and a form for recording recaptures. $25.

Email jessicaj@woodlanddunes.org for details.

Recent Owl Adoptions:
- The Daly Kids ~ from Victoria and Jordan Tyman
- Axel Ferrell ~ from Nan Hallock
- Mattias Ferrell ~ from Nan Hallock
- Magnus Ferrell ~ from Nan Hallock
- Tracy Folz

Thanks to our Teacher-Naturalists and Event Volunteers who make everything better at Woodland Dunes

Maple Syrup Teacher-Naturalists
We couldn’t do it without you!

- Geri Berkovitz
- Lou Ann Gray
- Ellen Lewellen
- Dick Luchsinger
- Jeannie Miller
- Mary Ozarowicz
- Susie Polk
- Mary Savage

Bird Breakfast Volunteers
A successful event with more than 300 pancakes eaten, 43 bird species spotted and more than 100 people having fun learning about nature!

- Geri Berkovitz
- Jean Biegun
- Lyn Brouchoud
- Lou Ann Gray
- Jody Henseler
- Emma Knickelbine
- Susan Knorr
- Betsy Kocourek
- Tom Kocourek
- Chris Kozak
- Barb Kussman
- Amanda Langman
- Donna Langman
- Kent Langman
- Jeannie Miller
- Bonnie O’Leske
- Susie Polk
- Jim Powers
- Mary Savage
- Sue Theys - WOW
- John Woodcock
- Julie Woodcock
- Lucy Zeldenrust

Bug-Eyed Pete St. Pat’s Day Jam

- Ben Birr
- Bug-Eyed Pete
- Kathy Danielson
- Lou Ann Gray
- Marty Gregory
- Al Kluczinkse
- Tom and Betsy Kocourek
- Mary Savage
- Fritz Schuler
- Rick Schultz
Thank You, Volunteers

Tree Sale
Craig Gates
Jeanie Miller
Jim Powers

Dash at the Dunes
Boy Scout Troup 925
Don DeBruyn
Lou Ann Gray
Patty Gray
Chris Jagodzinsky
Jacob Johnsrud
Nicole Johnsrud
Tom & Betsy Kocourek
Emma Knickelbine
Matt Knickelbine
Jim Knorr
Susan Knorr
Ellen Lewellen
Dave Nickels
Mark Nickels
Susie Polk
Martha Rasmus
Dan Scharnhorst
Patty Schneider
Lucy Zeldenrust

Why I Volunteer
Who was going to volunteer to help in the Butterfly garden at Woodland Dunes?
I decided to. I became a “who.” I volunteered my talents at Woodland Dunes spring of 2006 after the completion of the UW-Ext Master Gardening class with Dorothy Bugs as the facilitator. See all the work around here? I did! I decided to volunteer continuously since the benefits abound around this place which needs lots of tender loving care. I ask the boss first to make sure what I do is O.K. The results are always in progress and growth around the Butterfly Garden changes with time as does the weather. My favorite thing is composting to enrich the soil which leads to the R’s of: recycle, reclaim, reuse, or redo. Time quickly passes on, yet I always have time for love. The love of making a difference. I search to make things “better. I have this passion to clean up the environment if it is inside or outside which leads to my other interest to create and make. My sustainable practices keep the enthusiasm going. My idealism and creativity lead me to helping others along with hands on interests of art, craft, sewing, gardening, composting, landscaping, nutrition, cooking, baking, woodworking, music, singing and cleaning or organizing.
The decision to continue giving assistance at Woodland Dunes grows on you for the beauty of the earth. All the little creatures benefit by the efforts of getting lost in the moments of being closer to nature. I continuously learn from nature to challenge myself to get a peaceful natural education. Stories abound around. Come join me to enjoy all you can do, to beautify the interest of assisting nature, while learning by doing. There is more to do. come to Woodland Dunes for fun.
Carol Westphal

Summer Volunteer Spotlight
Carol Westphal
Working with our volunteers is an amazing experience. Their commitment to making Woodland Dunes work and their dedication to high standards of environmental ethics really inspires our staff.
A great example of such a volunteer is Carol Westphal, whom I met several years ago when she was contemplating establishment of a nature preserve on property her family owns in south-central Manitowoc County. Even though her schedule was and is more than full, Carol began helping in and around the Dorothy Star Butterfly and Bee Garden, working many hours to beautify the flower beds.
She continues to be very interested in composting, and has given composting demonstrations at our events. Carol also participated in our Natural Step study group to discuss sustainable communities.
Most remarkable of all, Carol is our own recycling wizard. She donated several containers which she labeled to receive different categories of recyclable items, and each week she sorts and disposes each item whether it is to be composted, recycled, or, as a last resort, dumped.
Carol’s recycling efforts helped us earn designation as a Travel Green Wisconsin destination. She is not only an outstanding volunteer but a role model to both visitors and our staff regarding thoughtful and sustainable living.

Jim Knickelbine, Director

Boy Scouts Help the Dunes
Our sincere thanks to the Boy Scouts from Troop 925 from Two Rivers (above) who cleaned up the Ice Age Trail and Columbus Street before the Dash for the Dunes.
This group holds their troop meetings at the Nature Center. The next time you visit, you may notice the new American flag in the Edna Smith Room that they donated. They also volunteer to help us with special projects, like the Dash at the Dunes, which is greatly appreciated!
Matching Donations:
Plexus
WPS Foundation

Donations
Jean Biegun (LNRP honorarium)
Fred & Charlotte Alyea
Bob Vinton

Fund Drive
Mr. & Mrs. Gerald Censky

Memorials
In memory of Dorothy Bugs
Margaret Alter
Donald and Mary Jane Backus
Cindy Bayless
Geri Berkovitz
Char Borisoff
Rosemarie Bugs
Lois Bush
Janet Chermak
Fran and Gladwyn Doughman
Steven and Marsha Driggers
Erwin and Eunice Eickhoff
Sue Elliott
Dennis and Sherry Ewert
Charles and Joanne Geiger
Doug Gleichner
Jeff and Marie Jentsch
Sally Kalscheur
Suzanne Karrmann
Donna Kickland
William and Mary Kiel
Doris Magyar
Mary Manis
Donald and Helen Massey
Dawn Frozena and Larry Mauritz
Vickie Mayer
Joretta Mountford
Joan Nate
Jodi Pavlik
Mary Savage
Joy Schaus
Jerome and Shirley Scrivener
Bill Seidl
Karen Seipel
Eugene Piette and Kathy Smith
Charles and Marilyn Sontag
Chuck and Carol Spiering
Steve, Teresa, Amanda
and Rachel Spiering
Tim, Kelly, Billy and Riley Spiering
Lyn Stark
Merle Steuwe
Sandy Stock
Steve and Doreen Stroff
Robert Swensen and Grace Peppard
Dave and Sally Swoboda
and Scotty Schettl

In memory of Betty Beaton
Laura Braun
Doris Magyar

In memory of Audrey Ospedale
Paul & Sheila Hansen

ABC Memorial Garden
Aegoluis Bird Club

In memory of Isabelle Seidl
Darlene Waterstreet
Rosie Bugs

In memory of Paula Knickelbine
Chris and Cory Blimel

In memory of Roland Geerds
Don & Helen Bleser

In memory of Juan Ott
his family

Bird Breakfast Sponsor
Browns of Two Rivers

Dash at the Dunes Sponsors
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Anytime Fitness - Two Rivers/Manitowoc
Browns of Two Rivers
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Festival Foods
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New members
Mary and Sandy Bohman
Aaron and Chelsea Duszyński
David and Anne England
Dennis and Sherry Ewert
Tracy Folz
The Hensel Family
David Isaacsen
Kris and Kate Koubaddy
The Lucy Kujawski Family
Wayne Vogel
Helping the Dunes

Calling all creative people!
Help raise money for Woodland Dunes by purchasing a bird house for just $5 in the Nature Shop. Paint it as creatively as you'd like and bring it back to the Nature Shop at Woodland Dunes the week of October 29th to enter it in a competition at the Getaway with the Dunes (see pg. 3).

Wish List
• a large, flat screen TV for Edna Smith room presentations
• two CD wallets that zip shut and hold at least 50 discs
• medium sized containers with mouse-proof lids
• metal or wood shelving unit with closable doors, no more than 34” wide, about 52” tall and 28” deep

Need to get rid of an old cell phone or battery?
Woodland Dunes is a Cellcom drop off site for unwanted cell phones and cell phone batteries. Proceeds support the Green Gifts Program, which offers grants to area organizations, programs and projects dedicated to supporting environmental sustainability.

Have a yummy burger . . . and help the Dunes!
Wendy’s Restaurant in Manitowoc is supporting Woodland Dunes through a special voucher promotion. Just clip the voucher below and present it when you order your meal now through July 31, and 15% of the proceeds will be donated to our organization. Thank you, Gary Kurtz and Wendy’s!

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.
Become a member!

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

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

Woodland Dunes

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

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