



# The Blue Mounds Area Project

Promoting Ecological Restoration and Stewardship of Native Habitats

Fall 2008

Volume 11 Number 3

Seed Collecting  
for the Future

Message from the Board

Renewals

Tools of the Trade

Prickly Ash  
(*Zanthoxylum  
americanum*)

BMAP Winter  
Education Series

## Seed Collecting for the Future

Cindy Ramseyer, BMAP Outreach Ecologist

This past year, I enrolled myself as a “Contract Botanist” with the Chicago Botanic Garden’s Seeds of Success (SOS) program. The national Seeds of Success program is part of an international seed conservation initiative collectively known as the Millennium Seed Bank (MSB) project, originally developed by the Royal Botanic Gardens, Kew, in the United Kingdom. This global program aims to bank 10 percent of the world’s flora by 2010 for long-term storage and conservation.

Seeds of Success was established in 2001 by the Bureau of Land Management (BLM) in partnership with the Royal Botanic Gardens, Kew, Millennium Seed Bank to collect, conserve, and develop native plant materials for stabilizing, rehabilitating, and restoring lands in the United States. To date, SOS has over 6,689 native seed collections in its National Collection. This material is being used for direct seeding in restoration projects such as germination trials, common garden studies, and protocol establishment. Portions of each collection are also being held in long-term storage facilities for conservation.

Between 2003 and 2010, the Chicago Botanic Garden has committed to collect seeds from 1,500 native species across the Midwest, with an emphasis on tall grass prairies species and the goal of conserving prairie plants before they become imperiled.

I am one of 36 botanists across the Great Plains region collecting seeds in what is labeled as one of the world’s most threatened habitat—the tall grass prairie region. Between 2003 and 2010, the Chicago Botanic Garden has committed to collect seeds from 1,500 native species across the Midwest, with an emphasis on tall grass prairies species and the goal of conserving prairie plants before they become imperiled.

### Why Save Seeds?

The following statements come direct from the Millennium Seed Bank project:

- Over the past 40 years, the Earth’s human population has doubled in size. There are now 6 billion people using the Earth’s diminishing resources.

- Despite our reliance on plants, we are at a crisis point. It is thought that 60,000 to 100,000 plant species are under threat.

Direct threats to plant survival are climate change, habitat loss, invasive alien species, and over-exploitation. The

root causes of these threats are difficult to control and include human population growth and socio-economic factors.

- With future climate change scenarios and the ever-increasing impact of human activities, the MSB intends to accelerate its activities to secure in safe storage 25% of the world’s plant species by 2020. The MSB and its partner seed banks are not mausoleums—the seed they contain remains alive for decades and, in many cases, hundreds of years.

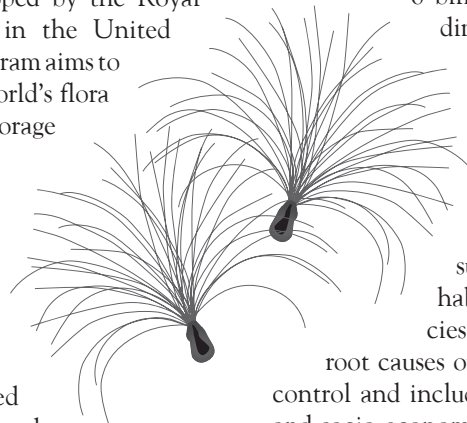
Wow. And we in the U.S. are worried about the rising price of gasoline? Those are facts that make my head reel. I get an eerie sense of urgency that, maybe, there is not much time before preservation becomes desperation.

### How to Help

All life on earth depends on plants. Plants are the basis

of ecosystems in which all animals, including humans, live, survive, and grow. By saving seeds we can save plants.

As private landowners, all of us can do something. Learn about the plants on your property by noticing which plants are common and which are not. Many plants escape our glance by being close  
*cont. page 3, see COLLECTING*



# Message from the Board

Carroll Schaal, BMAP President

## Greetings to everyone from the Blue Mounds Area Project...

In September we capped off the outdoor season with our third annual fall picnic, this time co-hosted with the Military Ridge Prairie Heritage Area (MRPHA) project partners. Because we have common goals and purposes, serve many of the same landowners, and share supporters, it seemed natural to host a common event celebrating private land conservation. On one of the more gloomy weekends last fall over 40 landowners and partners gathered to socialize, eat, and celebrate conservation. The purpose of the picnic was to thank all the partners and landowners for their dedication to and support of conservation and to celebrate recent accomplishments. The MRPHA partnership provided locally produced brats, burgers, and vegetables, and guests brought several delicious side dishes and desserts to share. While people finished eating, conservation awards and accolades were made.

Mary Rosenthal of rural Barneveld received BMAP's Bur Oak Award. In his nomination, Jim Elleson noted Mary's "personal energy and resources she has dedicated to restoring native vegetation on her 120-acre property. She is more physically fit and active than most people half her age, and much of what she has accomplished has been through persistent hand labor." A common face at workshops and seminars, she learns all she can about restoration and land management. She participated in BMAP's Ecologically Based Forest Stewardship project, has 30 acres in CREP and CRP, and is currently working on a stream bank restoration project with the U.S. Fish and Wildlife Service. Congratulations Mary!

The MRPHA Landowners of the Year award went to Eddie and Cheryle Goplin. The MRPHA partnership voted to recognize the Goplins because of the enormous amount of time they put into managing their high-quality prairie remnants, managing their

reconstructed prairies, and volunteering with The Prairie Enthusiasts. Eddie Goplin in turn thanked his son Erik, who turned Eddie and Cheryle onto their prairie path and is a big help with management. Congratulations to Mary, Eddie, and Cheryle!

Mary Rosenthal of rural Barneveld received BMAP's Bur Oak Award. In his nomination, Jim Elleson noted Mary's "personal energy and resources she has dedicated to restoring native vegetation on her 120-acre property."

A nice corollary to the day's events was provided by Mark Rooney. Mark, along with three siblings, owns nearby Cave of the Mounds and is a fourth-generation descendent of Ebenezer Brigham, the first permanent settler in Dane County and namesake of Brigham Park where our event was being hosted. In 2005 Mark and his family had worked with the Natural Heritage Land Trust and Dane County to purchase and ease a 27-acre parcel to the west of their property that was proposed for a 63-lot subdivision. Also adjoining the Military Ridge Bike Trail to the south, the site is a classic over grown savanna with 200-year-old oaks. Mark excitedly showed the gathering a map indicating a new land acquisition by Dane County that creates a corridor along the eastern edge of Brigham Mound, linking the bike trail through their first parcel all the way to Brigham Park! With additional land acquired by the County last year, eventually hikers and bikers will be able to leave the bike trail near ID and County Highway F, wind their way up to Brigham Park, and then continue west to Blue Mounds State Park where they can reconnect with the bike trail.

After the awards, BMAP ecologist Cindy Ramseyer led several participants on a hike through Brigham Park. What a day for local conservation! Thanks to everyone who attended and helped with the picnic, especially Greg Matthews, Paul Ohlrogge, and Katie Abbott.

While we're already looking forward to the new year's tours and events, we don't want to overlook the upcoming Winter Education Series. Right now we have four sessions planned. The first session is scheduled for January 15, 2009. Please see page 6 for details and be sure to mark your calendars.

In the mean time, it doesn't hurt to start thinking about next year's restoration activity. For inspiration, you may want to look at a few

of the Arboretum Leaflets now available on the web (page 3). Though the ground is blanketed in snow, Paul Kaaraka is already looking ahead by learning about tools for removing shrubs (page 4) and Cindy Ramseyer is contemplating the importance and ethics of collecting seed. One of those shrub-removal tools or a few packets of native seed (local eco-type!) might make a great gift any time of year. 🌱

## Thank You New and Renewing Members and Donors

*Member Changes and Donations Since the Last Newsletter*

### Supporter

Deane Arny  
Janet & Michael Brandt  
Kathy & Tom Brock  
David Ladd

### Contributor

Andrew Anderson  
Caroline Beckett & Frank Sandner  
Jim Elleson  
Mary Fritz  
Lee & Rosemary Jones  
Jane & Vincent Kavaloski  
Carla Ott  
Steve Thompson  
Don Waller

### Basic

Alan & Sandy Bemis  
Jesse Bennett  
Jan Ketelle  
Marie McCabe  
Bill & Donna Olson  
Gail Van Haren

Thank You Craig and Pam Heilman for the donation of a phone and color printer for the BMAP office.

As always we thank you for your support. Your memberships and donations are very important to the continued success of the Blue Mounds Area Project. Please be sure to check your mailing label on the outside to see if your membership has lapsed. Or, if it says complimentary or trial, please consider making donation or membership contribution so we can keep up the good work and keep sending you our newsletter. THANK YOU!

to the ground, nestled among other plants, or have a short period of flowering. Begin to pay attention to what you see around you. Are there plants you see in only one type of habitat? Are there plants that grow only in a single location? Initially, names are not as important as recognizing differences. Once this happens, naming things will matter to you because you recognize the differences.

You can then help by collecting the seeds of the unique and unusual plants that you have now identified on your property. Make note of where they grow, and disperse them across the landscape. While the odds of immediate germination is not as great as if you waited for

that prescribed burn, seeds can last years in the soil, waiting for the appropriate time to germinate. I do not know a naturalist who will scold you for spreading native seed. There is satisfaction of releasing seeds out of a car window... and here in Wisconsin, we need them everywhere—the

roadsides, old pasture and crop fields. Just think about it.

For those of you without your own property, become a voice for seeds, talking about the “taking” of seeds and the need to leave behind more than you take. This voice is an important part of wise stewardship; when it is silent, no one learns. With an increased interest in native plants for the landscape, for landscaping, and for preservation, has

All life on earth depends on plants. Plants are the basis of ecosystems in which all animals, including humans, live, survive, and grow. By saving seeds we can save plants.

come an increased decimation of those very resources. National forests, parks, and natural areas are finding increasing evidence of plant snatching from the wild. Seeds have become a viable commodity, and previously protected natural areas are now subject to increased disturbance from seed collectors.

## The Ethics of Seed Collecting

The Earth’s biotic communities are an endowment for humanity. The challenge facing the human species is to avoid depleting the principal at the expense of the interest. (paraphrased from a talk by Dr. Peter Raven, Director of Missouri Botanic Garden)

When collecting seed... first do no harm. Evaluate the population size and the current season’s fruit production and ask yourself the following questions:

1. Can the population size and current year’s seed output tolerate seed sampling?
2. If so, at what level?
3. Is it possible that others are also collecting seed from plants

in the region?

4. Is the plant species rare, in general or in the local area?
5. Is the population small?

If others are collecting seed, the species is rare, or the population is small, seed collection should be very limited or not done at all.

In *Ex-situ Plant Conservation Supporting Species Survival in the Wild*, 2004, in the chapter entitled “Effects of Seed Collection on Extinction Risk of Perennial Plants”, Menges, Guerrant, and Hamzé present three seed harvest rules:

1. Harvesting 10 percent of the seeds in 10 percent of years (every ten years or less) is generally safe.
2. Harvesting 50 percent of seeds in 50 percent of years (every other year or more) is generally not safe.
3. Less-intense, frequent harvests are safer than more-intense, infrequent harvests.

I strongly feel that the collection of seed—the origin of life for a plant—must be done with the best of intentions and integrity. Seed collecting ethics involve thinking about those who have collected seeds before you and those who will be collecting seed after you. Seed collecting involves considering the quality of habitat in which you are collecting and the competition issues facing the plants you are about the take seed from. Most importantly, it involves saying thanks, for without seeds, there is no life. 🌱

## Arboretum Leaflets Covering Restoration Issues Now Available Online

UW-Madison botany professor Joy Zedler has posted over a dozen Arboretum Leaflets covering restoration issues on her website for free downloading. Please visit [www.botany.wisc.edu/zedler/leaflets.html](http://www.botany.wisc.edu/zedler/leaflets.html) for more information.

### Titles include:

**Increasing Wetland Diversity: How One Plant Creates Habitat For Others** — A discussion of the ecology of tussock meadows and the multiple ways tussocks foster plant diversity.

**Characterizing Dominance: Which Species Are Dominant And How Do They Dominate?** — A discussion of what “dominance” means relative to plant species. Proposes a “species dominance index” which takes into account mean cover as well as suppression of other species.

**Adaptive Restoration** — An explanation of “learning while restoring”, an approach wherein restoration is undertaken as experiments, with each phase learning from earlier experiments and addressing new hypotheses about how best to restore degraded sites.

**Creating Heterogeneous Topography To Restore Sedge Meadow Diversity** — Nature is heterogeneous, but many restoration sites are graded smooth. We tested the idea that flat topography might slow sedge meadow development. We built small mounds and seeded native species to both mounded and flat plots. As hypothesized, the mounded plots supported more plant species.

**Why Are Wetlands So Valuable?** — This leaflet draws on the estimates of Costanza et al. (1997) to quantify, in dollars, the annual renewable ecosystem services attributable to wetlands.

# Tools of the Trade

Paul Kaarakka, BMAP Board

One of the most intimidating problems facing BMAP land stewards is dealing with large areas of invasive plants. In the case of shrubs such as Honeysuckle (*Lonicera spp.*<sup>1</sup>) and the Buckthorns (Common, *Rhamnus cathartica*, and Glossy, *Frangula alnus*<sup>2</sup>), controlling populations is made more difficult by the large size of the plant. Size matters here both in terms of getting to the base of the plant, and in doing something once you get there! A common removal technique is to cut the shrubs near the base and then paint the cut stem with a herbicide to try and prevent resprouting. At BMAP summer events over the last two years, we have also heard about using basal bark herbicidal sprays. These techniques can be successful depending on when cutting is

done and how well herbicides are applied, among other factors. Some detailed information on these techniques can be found on the Savanna Oak Foundation web site at [www.savannaoak.org/brushcutting.html](http://www.savannaoak.org/brushcutting.html).

However, some folks might prefer to minimize or eliminate the use of chemicals and chainsaws in their restoration work, and are willing to tackle shrub removal by hand. What follows is some information on three hand tools designed for removal of shrubs with shallow root systems that can potentially make this work a little more feasible. Disclaimer: I have not personally used these tools, so I cannot recommend or endorse any of them. Perhaps some of you have, and could add your pros or cons using the BMAP email discussion list<sup>3</sup>.

The tools discussed are the Weed Wrench (say that three times fast and see what comes out), the Honeysuckle Popper, and the Root Talon. Each tool uses a long lever arm to lift the offending shrub out of the ground. That's why they are advertised for shrubs with shallow root systems. Obviously, soil condition affects ease of removal. Dry, hard packed soil will be much less yielding than the fluffier soil often found in a densely shaded understory. There is also the issue of soil disturbance associated with ripping a shrub out of the soil. Unrepaired disturbance will lead to soil loss on any kind of slope, so tamping any loose soil is recommended. Soil disturbance can also lead to stimulation of the underlying seed bank by exposing seeds to light, but in the case of an established

## The Weed Wrench

(<http://www.weedwrench.com/>)



The Weed Wrench seems to be the granddaddy of the three tools discussed, having been developed around 1988. The tool works as a lever with a jaw at the fulcrum that grips the shrub at the base while pulling. It comes in several sizes, from 24 lbs with a 62-inch handle down to about 5 lbs with a 24-inch handle. It is made entirely from steel so it can be welded if damaged. At \$189, plus shipping, it's not cheap, but a solid and venerable tool with lots of web references and discussion.

## The Honeysuckle Popper

(<http://mrhoneysuckle.com/>)



The Honeysuckle Popper is also a heavy-duty tool that comes in a couple of sizes. The larger size weighs in at 28 lbs with a 72-inch handle. Instead of gripping the base of the shrub, the tip of the tool is inserted under the base of the plant and the lever action lifts up rather than pulling. The tool's handle, tip, and pivot are steel mounted on a wood base. Apparently, the wood base is more stable than metal and less likely to slide when under pressure. Price for the larger size is \$139, plus shipping. "Mr. Honeysuckle's" website is quite extensive and entertaining—well worth a look.

## The Root Talon

(<http://www.roottalon.com/>)



The Root Talon is a lighter-weight tool billed as particularly suited for buckthorn removal; however, its size would seem to restrict it to smaller shrubs and trees. It has a 12" by 6" forked steel base that functions as bush grip and fulcrum, on which is mounted a 36-inch fiberglass handle. It is considerably cheaper than the other two tools at \$47, plus \$9.95 shipping.

stand of shrubs, there are probably plenty of replacement seeds near the surface that will germinate anyway once the shrub is removed by any means. The roughened soil can also serve as a catch for newly transported weed seeds that will compete with any subsequent seed plantings.

Since removal will leave some roots that are broken off but remain in (or on) the soil, there is also the issue of resprouting. The Honeysuckle Popper distributor claims that buried root fragments will not resprout; however, other sources say that cut stems are problematic. Invasive Plants of the Upper Midwest, for instance, says that “cut honeysuckle stems will resprout vigorously if the stump is not treated with a herbicide.”<sup>4</sup> Given the potential seed bank in a heavily infested area, however, it is not likely that one pass will be enough to eradicate all shrubs, and return control visits will be required in any case.

Doing this kind of work is seriously hard on the body, particularly the back, what with all the bending, pulling, prying, and carrying. The long handles on the larger tools help reduce back strain in the prying part at least. You might think—hope?—that you just smoothly and effortlessly coax the plants from the ground, but it appears that the most effective operation is to yank on the lever arm a few times to loosen up the soil around the roots, and then pull the arm down completely to dislodge the plant. A 25-lb tool is a lot to haul around all day, but then a chainsaw isn't exactly light either. The Weed Wrench and Honeysuckle Popper look as though they might benefit from some kind of a handle that would make hauling an otherwise unwieldy tool somewhat easier. For the most part these hand tools would be much safer than a chainsaw; however, at least one review strongly recommended against using them on a steep hillside. 🌿

#### Endnotes:

1) The Wisconsin DNR Invasive Plant website ([dnr.wi.gov/invasives/plants.asp](http://dnr.wi.gov/invasives/plants.asp)) lists five species of Honeysuckle! There are Honeysuckles native to Wisconsin as well, but these are all woody vines, not shrubs.

2) Glossy Buckthorn is also known by the scientific name of *Rhamnus frangula*.

3) If you are not signed up for the BMAP email discussion list, you can do so easily by going to the BMAP website, [www.bluemounds.org](http://www.bluemounds.org), and following the directions on the “Mailing List” page.

4) Czarapata, E. J., 2005. *Invasive Plants of the Upper Midwest*, University of Wisconsin Press.

## Prickly Ash (*Zanthoxylum americanum*)

Cindy Ramseyer, BMAP Ecologist

Ah yes, Prickly Ash (*Zanthoxylum americanum*), the shrub we all love. Our favorite member of the Caltrop (*Rutaceae*) family. It rips at our clothes and creates impenetrable thickets of dense growth. Bearing thorns and about five feet tall—a perfect height to grab your hat, pull your hair, rip at your skin!—it stops us from blazing through the woods.

Would you have ever thought to plant this shrub? Actually, the ethnobotanist Melvin Gilmore, studying Omaha tribes in Nebraska in the 1910s, suspects that it was planted, with its effervescent fruits used as a perfume. Actually, all parts of the shrub are fragrant, releasing a delicious resinous orange-like perfume when bruised or crushed.

Prickly Ash is not just a menace in Wisconsin, but is found across eastern North America—ranging from Quebec to Florida, and west to Minnesota and Oklahoma. It is found in open, rocky woodlands, thickets in prairie ravines, along fence rows, and roadsides, particularly on limestone-derived soils. In some landscapes it is aggressive; in other landscapes Prickly Ash exists as part of a diverse shrub community.

The Mesquakie, also known as the Fox Indians, migrated west into Wisconsin under pressure from the Iroquois with the arrival of Europeans along the Atlantic seaboard during the 1600s. Like all indigenous Americans, the Mesquakie utilized the plants around them for healing, for nutrient value, and for spiritual ceremony. The Native American herbalist relied on cultural and personal knowledge. Being moved from one region of the country to another required the constant shifting and rearranging of their knowledge to accommodate new information and new environments. To be able to survive, medicine healers utilized their knowledge of the plant from past generations (cultural knowledge) and knowledge gained from personal experiences (rips at the skin, smells like orange, you walk around it, not through it). Given the list of medicinal properties below, the Mesquakie were thankful to find Prickly Ash plentiful here in Wisconsin.

The Mesquakie used four distinct parts of the Prickly Ash: the bark of the trunk, the bark of the root, the berries, and the leaves. The bark and berries, a strong expectorant, were used to make cough syrup and to treat tuberculosis. The inner bark was boiled with

the root of wild sarsaparilla (*Aralia nudicaulis*) and a second unknown root to make tea that was drunk to gain strength during illness. The berries were mixed with the insect gall of another plant (likely goldenrod, *Solidago canadensis*), and a tea was made to cure kidney trouble. The powered inner bark was used to treat toothaches. Prickly Ash is also referred to as the Toothache Tree.

European settlers brought with them their own knowledge of medicine, as well as many of their medicinal plants (many of which today are weedy naturalized plants). The European herbal medicine was often traded for Indian knowledge, and vice-versa, rapidly dispersing knowledge throughout the region. Early settlers picked up on the properties of Prickly Ash, adopting remedies used by the local tribes. They also used Prickly Ash for diarrhea, fevers, and flatulence.

Prickly Ash found fame in 1849 and 1850, when the physicians in Cincinnati used it to treat the Asiatic cholera outbreak (wonder how that would go over today in the medical world!). It was considered superior to all other medicines for treating pneumonia and typhoid. The dried bark was officially listed in the United States Pharmacopoeia (USP) from 1820 to 1926. The berries were officially listed in the National Formulary from 1916 to 1947 for treating sore throats and tonsillitis. Today, the USP still exists, and is the official public standards-setting authority for all prescription and over-the-counter medicines and other health care products manufactured or sold in the United States. Perhaps we should all petition for the re-listing of Prickly Ash to create its medicinal market once again.

The next time you walk by Prickly Ash, break one of the branches and take in the smell. Examine the wood, which has a bright yellow interior. Consider drying some of the bark to mix up some cough syrup. Who knows—we all just may come to appreciate this “nasty thorny shrub” a bit more. 🌿

The information for this article came from the following two sources:

Kaye, C., and N. Billington, 1997, *Medicinal Plants of the Heartland*, Cache Rive Press, Vienna, IL.

Kindscher, K., 1992, *Medicinal Wild Plants of the Prairie, an Ethnobotanical Guide*, University Press of Kansas, Lawrence, KS.

# JOHN F BIRD ACCOUNTING

**John Bird**  
and  
**Barb Parrell**

608-767-3722 / Phone  
888-767-4142 / Toll Free  
johnfbird@tds.net

www.johnfbirdacct.com

1116 Mills Street · P.O. Box 416  
Black Earth, WI 53515-0416

## BMAP Winter Education Series

Thursday evenings starting at 7:00 pm until 9:00 all scheduled  
for the State Bank of Cross Plains in Mount Horeb.

### Funding Your Conservation Project January 15, 2009

An overview for landowners to the alphabet soup of agency financial assistance for habitat, water quality and land improvement and protection projects with time for questions. Katie Abbott, Military Ridge Prairie Heritage Area Project; Melissa Keenan, Pheasants Forever; and others.

### Stream and Wetland Restoration in the Driftless Landscape January 29, 2009

Principles of local stream ecology and example of projects aiming to create and restore habitat and improve water quality. Panel presentation with Robert Hannis, Wisconsin DNR Watershed Manager; Pat Sutter, Dane County. Conservationist; Dave Marshall, H2O Underwater Habitat Inc., and others.

### Native Seed Collection and Propagation February 12, 2009

Learn the principles of native seed selection, stratification, germination, and transplanting. BMAP is honored to host Corrine Daniels, Director of Restoration Nurseries for Applied Ecological Solutions. Corrine provides professional management for the most diverse, multi-state, native seed and plant nursery operation in the Midwest. As part of Applied Ecological Services, the AES Restoration Nurseries specialize in seed and plant materials of local genotype. In 2004, Daniels established the Military Ridge Prairie Heritage Area local ecotype native nursery for the Wisconsin DNR, The Nature Conservancy, and Prairie Enthusiasts. These local ecotype seeds are now available through Taylor Creek Nursery for the general public.

Daniels has nearly 15 years of hands-on experience in the production of native seed and plants and enjoys sharing her knowledge of propagation techniques and passion for native plants with the public.

Bring seeds and participate in our first annual seed swap. Discuss opportunities for seed collecting on member properties in 2009.

### Citizen Monitoring on Land and in the Water February 26, 2009

**Land** – An introduction to our own citizen-action monitoring project, to begin in spring of 2009. This year's pilot program will focus on savanna and woodland habitat, where we will collect information on Wisconsin spring wildflowers and garlic mustard. Each landowner who participates will receive training in spring plant identification and monitoring that will assess plant diversity. This talk will highlight the benefits of involvement for the landowner, volunteer monitors, and the resource.

**Water** – Becky Olson, the executive director of the USRWA, will discuss citizen monitoring efforts along stream corridors and how that information is being used in policy and conservation today. This is an opportunity to learn how each of us can participate and contribute to the advancement of science and knowledge of our own backyard, get outside, and meet like-minded people!

Inventory, Assessment, Management and  
Restoration of Native Plant Communities



### Own Land? Buying Land? Do you want to...

Learn about your property's flora, fauna,  
natural history, and ecological health?

Restore or manage prairie, oak savanna,  
or other native plant community?

Control invasive species, conduct a  
prescribed burn or clear brush?

Then visit our NEW website

[www.gobiologic.com](http://www.gobiologic.com)

and let us know what you need.

(608)277-9960 - [biologic@chorus.net](mailto:biologic@chorus.net)



# BIOLOGIC

ENVIRONMENTAL  
CONSULTING, LLC

Managing native lands since 1991

## Our Mission:

The Blue Mounds Area Project is a community-based organization that seeks to inspire, inform and empower private landowners in the Southwestern Wisconsin region to enjoy, protect and restore native biodiversity and ecosystem health.

## Our Objectives:

- 1) Promote understanding, appreciation and conservation of native woodlands, prairies, wetlands and savannas and their special species in an economically viable manner, through community outreach programs and private contacts.
- 2) Act as a clearing house for information from people and organizations involved in preserving native biodiversity including information about plant, animal and habitat identification, management, restoration, seed sources, native plant nurseries and invasive, nonnative species.
- 3) Encourage cooperative, volunteer restoration and management activities.
- 4) Identify public and private land use changes that may affect ecosystem health and promote community-based stewardship of the unique natural heritage of the Blue Mounds and the Southwestern region of Wisconsin.

---

The Blue Mounds Area Project Newsletter is published quarterly.  
We welcome your comments, submissions, and advertisements.

Deadline for submissions for next newsletter: February 20, 2009; contributions always welcome

Send submissions to: Editor, Blue Mounds Area Project, PO Box 332, Mount Horeb, WI 53572 or [jaraasch@tds.net](mailto:jaraasch@tds.net)

Editor: John A. Raasch, [jaraasch@tds.net](mailto:jaraasch@tds.net) — Designer: Julie Raasch, [jul@creative-zoo.com](mailto:jul@creative-zoo.com)

---

## BMAP Board of Directors

Carroll Schaal  
President and Treasurer  
608-437-6247  
[schaal1@mhtc.net](mailto:schaal1@mhtc.net)

Paul Kaarakka  
Secretary and Membership  
608-827-5164  
[info@bluemounds.org](mailto:info@bluemounds.org)

---

If you would like to be a member  
of the BMAP Board please contact

Carroll Schaal  
608-437-6247  
[schaal1@mhtc.net](mailto:schaal1@mhtc.net)

Volunteers Always Welcome!

## Blue Mounds Area Project Membership Form

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

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

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

E-mail address: \_\_\_\_\_

Membership Status:

Renewal     New Member     Gift Membership for \_\_\_\_\_

Membership Level:

Student \$15     Basic \$30     Contributor \$50     Supporter \$100     Sponsor \$500     Patron \$1000  
 Other contribution to further the BMAP mission \_\_\_\_\_

TOTAL \_\_\_\_\_

*\*\*All contributions are tax-deductible to the fullest extent of the law.\*\**

Yes, I would like to receive information about site visits.

Make check payable and return to: BLUE MOUNDS AREA PROJECT, PO BOX 332, MT. HOREB, WI 53572