

The PRAIRIE PROMOTER

VOL 28, NO. 2 SPRING 2015

Grassroots Conservation at Work

One Plant at a Time

by Marci Hess & M.J. Hatfield

(Editor's Note – TPE members Marci Hess and M.J. Hatfield have volunteered to contribute a series of articles on insects in the prairie for The Prairie Promoter. The articles will include many links to the BugGuide website, which has more details and photos of the insects described. The PDF version of the Promoter available on the TPE website (www.ThePrairieEnthusiasts.org) will have active links to make it easier to go directly to these pages.)

How many insects can you name that depend on or utilize Leadplant (*Amorpha canescens*) to sustain their lives? Understanding host plants and their associated insects is important but can be difficult as most of these relationships have not been intensely studied. When you see a larva eating a plant, the plant is considered a host but the larva may not be dependent on that host. Figuring out these relationships is a life goal and every day in the field brings new information... one plant at a time!

IN THIS ISSUE				
Executive Director's Message	Page 2			
President's Message	Page 3			
TPE Members Lobby for Conservation	Page 3			
Volunteers Needed for Leadplant Insects	Page 5			
What are Prairie-dependent Insects?	Page 6			
Strawberries and Roses	Page 7			
Snowy Owl Visits Schurch-Thomson Prairie	Page 8			
Monitoring & Management	Page 9			
TPE Annual Conference	Page 10			
Chapter News	Pages 12-14			
New Members & Donations	Pages 14-15			

Leadplant Flower Moth (Schinia lucens) Photo by M.J. Hatfield



At this writing, there are 7 moths (2 of which are newly discovered), 1 gall fly, 2 weevils, and 1 *Hemiptera* that utilize Leadplant. There are probably many more. A good example of this is Andrew Williams' research on insects that use Marbleseed (*Onosmodium molle*); he found 115 insects utilizing that plant in some manner. Let's explore each of the insects that we know about who may be host specific to Leadplant a bit further.

Fives moths that depend on Leadplant for their larvae to develop are Leadplant Gall Moth (*Walshia amorphella*), Three-staffed Underwing (*Catocala amestris*), Leadplant Flower Moth (*Schinia lucens*), the Black-spotted Prominent (*Dasylophia anguina*) and *Hystrichophora taleana*. Two of these are listed as endangered in Michigan, citing a loss of habitat. These are probably endangered in other states as well, regardless of whether they have that legal status. These same ones are listed in Wisconsin as rare or uncommon prairie-dependent insects.

A gall maker that requires Leadplant is the moth, Walshia amorphella. Without A. canescens and A. fruticosa, the larvae of these moths would not survive; their bodies

Continued on page 4

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The Prairie Promoter Editor 608.345-8297	Scott Fulton editor@theprairieenthusiasts.org				

Planning for a Strategic Future

Chris Kirkpatrick, Executive Director

Spring has certainly arrived in the upper Midwest. With the seemingly constant uncertainty of the weather, we are being even more diligent and intentional to utilize every precious burn window. As we look into the future, anticipating and planning how to handle this uncertainty in a strategic manner is key. At the



moment the Board of Directors is doing this analysis for the whole organization by developing our next three year strategic plan.

Our current plan ends in 2015, and we are now reflecting on how effective it has been. Some of our big accomplishments have been changes to enhance our financial management, improving our membership program, expanding staff, and most recently having a centrally located office. We have also thoroughly examined our policies and procedures to be sure we are a legally, fiduciary, and ethically operating organization that has made us ready to pursue accreditation with the Land Trust Alliance in the future. All of these accomplishments enable each of our local chapters to more effectively carry out our mission on the local level by continuing to protect key pieces of our prairie heritage, with field trips and educational programs such as the annual Prairie Day events, and implementing the burn policy to enable us to safely burn while still continuing the unique culture of The Prairie Enthusiasts.

At this time we need to discuss how we want to grow as an organization and what our focus should be for the next three years. Some questions that the Board is asking each chapter leadership are what type of educational and outreach program support would be most helpful? How are we going to ensure we are meeting the land management needs of the sites we own? How can we expand the capacity of all the chapters to effectively manage the special places they are connected with and care for locally?

The Board Development Committee has begun asking these questions, and garnering input from both Board members and chapter leadership. As we move into drafting this new plan, the staff and Board will be seeking input from chapter leadership, donors, volunteers, and the membership as well. Your comments and input will be extremely important for the Board to develop a plan that propels The Prairie Enthusiasts to grow, be a diverse collection of chapters, and seek ways to support our ever shifting needs. Just as we can plan and execute effective burns in a changing world, with your input we will develop a strategic plan that enables us to have new and innovative ways to accomplish our mission and ensure the perpetuation and recovery of prairies and savannas throughout the upper Midwest.

TPE was incorporated in Wisconsin in 1987 as a private nonprofit, tax exempt corporation under section [501(c)3] of the Internal Revenue Code. Donations are tax-deductible. The Prairie Promoter is a quarterly publication of The Prairie Enthusiasts. No part of this periodical may be reproduced without permission. We welcome articles, announcements, artwork and photographs relevant to prairie and savanna ecosystems. Mail or e-mail submissions to local chapter editorial volunteers or to The Prairie Promoter editor. Deadlines for submission of material are Apr. 17 (Spring issue); July 24 (Summer issue); Oct. 23 (Fall issue); and Jan. 15 (Winter issue). If you would like to receive electronic notification of the newsletter, please e-mail Joe Rising at TPE@theprairieenthusiasts.org.

President's Message

by Jack Kussmaul

In this message I am writing about a problem that is common to most non-profit organizations. The problem is the difficulty we have in generating sufficient income to do the things we all would like to do. This problem seems especially acute for TPE. We are land rich but cash poor.

We pride ourselves in being a boots on the ground volunteer organization. It is true that our volunteer base is our strength. Still, our land holdings and obligations seem to increase more rapidly than our volunteer base. If other chapters are like mine they are able to manage the properties we have obligated ourselves to care for, but just. There are never enough people to do the job quite the way we would like to. One solution is to find more volunteers, which with everyone leading busy lives, are often difficult to find.

The alternative is to increase the cash available to pay contractors to support the volunteer base. Eventually this is going to be a greater necessity. It is something we need to be working at now. As to current operating budgets, if all or even a significant portion of our membership would increase their giving just a bit, it would make a big difference.

We also have two specific giving programs. The first is the Compass Club. This is a group of members who contribute an unrestricted \$1,000 or more to TPE each year. The first recognition and thank you event for Compass Club members was held a year ago and was a great success. Further events are being planned. Compass Club members, we cannot thank you enough!

Second is the Legacy Circle that we formed a few years ago. This is a group of people who have included TPE in their estate plans. For most non-profits the largest gifts come from estates. These gifts are often placed in endowments. The principal (the original gift amount) remains intact but the income is used to support operations. TPE does have some endowments but they are relatively new and at this point do not make a large contribution to our total budget. I am involved in another older non-profit that has reached an endowment of \$5,700,000. It takes a 4% draw on this each year, or \$228,000. A steady source of income of this amount would be fantastic for TPE. I am confident we will get there some day but it will take time. If you want to help preserve and protect in perpetuity the places we all care about you may help build our endowments through a will, trust, beneficiary designation, donor advised fund or one of many other options. If you have questions on this or wish to discuss it you should feel free to contact Chris Kirkpatrick or me. It is something you may wish to discuss with your own financial advisor as well. You can provide that the funds you place in an endowment be used for general TPE needs, a specific purpose or a specific project. If this is something that could work for you we can discuss with you the current endowments that are in place.

Remember that this is not a substitute for volunteers. We need to continue to recruit new volunteers, while working at the same time on our financial health. And remember, we are committed to preserving our preserves for perpetuity. Perpetuity is a rather long time. We need your help.

TPE Members Lobby for Conservation

by Scott Fulton

Several Prairie Enthusiasts were among the over 250 people who attended the annual Conservation Lobby Day event on April 14 at the Wisconsin state capitol in Madison. This event is sponsored every year by the Wisconsin League of Conservation Voters (WCLV), a non-partisan organization that works to elect state legislators who support conservation and to lobby on specific issues.

There was a special urgency this year because of proposed major changes to key conservation programs in the governor's proposed state budget. The most critical for TPE is a proposed 12-year freeze in new acquisitions of land using the Knowles-Nelson Stewardship Program, a major component of the funding for most of the land purchases and conservation easement projects TPE has undertaken.

Other focus issues in the state budget for the WCLV this year were the proposed elimination of one third of the scientific research staff of the DNR, cuts to the county conservationist program and changing the DNR citizen oversight board to a purely advisory capacity. The latter issue was resolved the next day when all non-budgetary policy items were removed from the budget by the Joint Finance Committee. The other three issues are all still in play.



Photo courtesy Office of Rep. Diane Hesselbein

Three members of the Empire-Sauk Chapter (Rose Sime, Scott Fulton and Sherry Caves) met with the staff of Senator Jon Erpenbach (D – Middleton) and Representative Diane Hesselbein (D – Middleton). Coulee Region Chapter members Pat Caffrey and Ned Gatzke together with TPE Executive Director Chris Kirkpatrick also attended and met with Senator Jennifer Schilling (D – LaCrosse), Representative Jill Billings (D – LaCrosse) and Representative Lee Nerison (R – Westby).

3

Spring 2015

are not adapted to accept the nutritional qualities of other species. Although quite common in prairie remnants, we have not seen it in a planted prairie. Look closely and if you find this gall or this moth in a planted prairie, post it to BugGuide.

http://bugguide.net/node/view/586175

Three-staffed Underwing (*Catocala amestris*) is endangered and legally protected in Michigan because of the loss of habitat that supports its host plant. This moth is also found in Iowa, Wisconsin, and Kentucky.

http://bugguide.net/node/view/484745

http://mnfi.anr.msu.edu/explorer/species.cfm?id=11912

Leadplant Flower Moth (Schinia lucens) is a beautifully mottled purple moth that is also listed as endangered and legally protected in Michigan and in Wisconsin; in fact, it has only been found in one small remnant. BugGuide does not show any sightings of this moth in Wisconsin. Finding the larvae is usually easier than finding the adult even though they are very good at blending into their environment! The larvae doesn't fly away and is generally around longer than the adults. Maybe if all the TPE folks began to scour the leadplants in their area, we might be able to find one!

http://bugguide.net/node/view/892910

http://mnfi.anr.msu.edu/explorer/species.cfm?id=12057

The Black-spotted Prominent (*Dasylophia anguina*) is a gorgeous caterpillar with colorations and hues that can differ with each one; some colors are pastel, some are very bright but they all have lavender, orange, and yellow.

http://bugguide.net/node/view/888174

And the fifth moth whose larvae utilizes leadplant is *Hystrichophora taleana*. Unlike the others discussed, this one also utilizes plants in the genera *Dalea* and *Psoralidium* as their larval hosts.

http://bugguide.net/node/view/745654 http://bugguide.net/node/view/660390

It's not just moths that need Leadplant to raise their next generation. There is a gall fly in the *Cecidomyiidae* family that puts beautiful red-orange conical galls on leadplant leaves. We know the genus of this *Diptera* is *Rhopalomyia* but the species has yet to be described. We need someone who is willing to rear these in order to get a good adult specimen that can be officially named and described. Attempts to rear one have been unsuccessful but resulted



Rhopalomyia galls on leadplant Photo by M.J. Hatfield

in good information nonetheless as it was discovered that a *Pteromalid* wasp parasitizes this gall. You can see a photo of this wasp at: http://bugguide.net/node/view/898580 and a photo of these galls at http://bugguide.net/node/view/274814

Two weevils, *Trichapion modicum* and *Trichapion minor*, need this plant to survive. In September 2012, the Hitchcock Nature Center in Honey Creek, IA embarked upon an inventory prior to determining a management plan. Literature shows *T. modicum* "breeds in the inflorescences of Amorpha canescens: its host. The larvae develop in the legumes." According to Kissinger(1968), this species was unknown in Iowa; it could be because the weevil, to date, has only been found in prairie remnants and it is very, very tiny and difficult to identify, nor is it part of the mega fauna that catches the eye of those unless they are looking very closely.

The insect is conservative to dry-mesic prairie throughout its geographic range and especially in those prairies that have developed on sandy soil. The adults occur on the tightly budded inflorescences the last week of May and breed on the plant from that time to July and early August when flowering ceases. In 2005, Scott Sauer did an inventory of this subfamily in Wisconsin and found both of these weevils were quite common where Leadplant was abundant with Trichapion minor being more widespread. In 2009, Wisconsin DNR had both weevils listed as rare or uncommon prairie-dependent insects. The Wisconsin Wildlife Action Plan (2005-2015) shows *T. modicum* has been nominated to be on the 2015 Species of Greatest Conservation Need.



Trichapion modicum Photo by Ron Panzer

Neither of these weevils has an info sheet on BugGuide, demonstrating that they are often overlooked.

The 2 newest described moths, to date, have only been found in remnant prairies. They are *Filatima revisensis* and *Anacampsis wikeria*. Both were raised from their caterpillars who weave together the leaves of *A. canescens* with silken threads to form a shelter. The woven shelter of *F. revisensis* can be the entire leaf while the shelter of A. wikeria is at the apex mimicking the normal growth of the leaf. Both of these moths probably have a larger range than what is known. Also interesting is that these new discoveries of moths are being identified because of their host plant



Filatima revisensis caterpillar Photo by M.J. Hatfield



Anacmpsis wikeria caterpillar Photo by M.J. Hatfield

preference and knowing this makes it so much easier for all of us to look closer and expand the known range!

Filatima revisensis is named after the Revis Hill Prairie in Mason County, Illinois where it was originally found. It has also been located in Illinois, Iowa, and Minnesota. These moths are bivoltine with the both generations overwintering as larvae.

http://bugguide.net/node/view/900559

The other newly described moth, *Anacampsis wikeri*, is named for Illinois lepidopterist James Wiker, who discovered the species and documented the life history. This moth has been found in Illinois and Iowa. They are univoltine, producing one generation in a year, and overwinter as adults.

http://bugguide.net/node/view/900575

Much like the moth, *Sympistis forbesi* covered in a previous edition of *The Prairie Promoter*, the adults of *F. revisensis* and *A. wikeri* look so similar to other moths that they are indistinct until reared from their caterpillars or dissected to see their genitalia. Having three examples in the last year of newly described moths is a big indicator that attention to host plants and the larvae that garner their nutrition from them is imperative if we want to learn more about the insects in our remnants and restorations.

Finally, a mystery to us prairie folks is a little bluish hemipteran found on Leadplant. This little blue *Hemiptera* has been posted on BugGuide in want of an identification. In the *Psylloidea* superfamily is the closest this one can be narrowed for identification at this time. BugGuide states that members of this family are known to have very narrow host plant needs. Be on the lookout for this one and if you find one, take a photo and post it on BugGuide.

http://bugguide.net/node/view/864493

Knowing what insects use a plant and how they use it may seem trivial but knowledge of ecological connections of plants and insects can lead to improved management practices, healthier ecosystems, and dare I say, personal happiness because of the joy of discovery and learning! Unfortunately, there is no single source for this info so our knowledge is gained one plant at a time! Which plant will you choose to investigate?

Volunteers Sought to Search for Leadplant Moths

Would you like to help find rare prairie insects? If so, here is your chance. The Prairie Enthusiasts (TPE) is looking for volunteers to spend time in the field carefully and thoroughly inspecting leadplant (*Amorpha canescens*) for signs (galls, larvae, adults) of six moth species that are thought to feed solely on leadplant or, in some cases, also its close relative indigo bush (*A. fruticosa*). The species are the leadplant flower moth (*Schinia lucens*), two species of underwing moths (*Catocola whitneyi* and *Catocala abbreviatella*), the late leadplant leaf-twirler moth (*Filatima revisensis*), the

early leadplant leaf-twirler moth (*Anacampsis wikeri*), and the leadplant stem-gall moth (*Walshia amorphella*).

The primary goal of the project is to search sites owned, eased, or managed by TPE, but also other preserves and privately-held remnants, so as to get a better handle on the status and distribution of these species. If you are interested in helping, contact Rich Henderson (*tpe.rhenderson@tds. net* or 608-845-7065) to learn how to participate and obtain training.

What are Prairie-dependent Insects?

by Rich Henderson, Research Ecologist, WI DNR Bureau of Science Services

In discussions about the conservation of prairies and related natural areas of the Midwest, there is often mention of prairie-dependent or remnant-dependent insects (or other invertebrates). Sometimes the terms used are conservative, specialist, or restricted insects, but they all generally refer to the same concept—a group of insects with a very tight, even dependent, relationship with native prairie. Sometimes the term "remnant" is used instead of "prairie" so as to include savanna and sedge meadow communities, along with prairie. This is done because of the frequent overlap in species among these natural area types.

These specialist insects depend upon, and thus are rarely found outside of, remnants, or at least good quality restorations. Most often they are species that require a specific plant species, genus, or family at some point in their life cycle (they are host-specific) and, in turn, their host plants are primarily limited to remnants or restoration plantings. The group may also include specialized predatory or parasitic insects that require certain prey that are, in turn, tied to prairie vegetation. It may also include insects dependent upon other characteristics of the remnant prairie sod/community that we do not yet understand. Unfortunately, for some insects, we do not know fully what they eat or how host-specific they are in their needs. Assigning species to the prairie-dependent category, for which we have little or no host specificity, is done based on survey work that has so far found them only on prairie remnants, or they have only been found within the former prairie region of the continent (Metzler et al. 2005).



Marty Grell - Of Butterflies and Butterflyweed (Finalist in 2015 TPE Photo Contest)

As you can see, classifying species as prairiedependent can be a little complicated, messy, and subjective. It is certainly a work in progress. Following are a few examples that may help you better grasp the concept. The monarch butterfly is a well-known example of a host-specific insect. Its larvae (along with the larvae, adults or both of a dozen other insect species) feed only upon milkweed species, and most milkweed species are primarily limited to remnants/restorations. A seemingly good candidate for remnant-dependent, right? Well, as you may already be thinking, there are two milkweed species, common and whorled, that regularly grow in abundance in non-remnant/ restoration settings, such as roadsides, old fields, cropland, disturbed ground, etc. This is certainly the case, therefore, the monarch, and all of the dozen or so other milkweedeating specialist insects, are not remnant-dependent. Close, but not quite.

The Karner blue butterfly, on the other hand, is a much better example. Its larvae require wild lupine, and lupine is highly associated with remnant sand savanna. Yes, lupine may be found in sandy roadsides and sandy old fields, but these are generally settings where native sand savanna and prairie vegetation is reestablishing from a nearby seed source (much like in a restoration). Lupine, however, is not widespread on the landscape like common milkweed. Therefore, most ecologists include the Karner blue in the restricted/specialist category. An even better example of a prairie-dependent species is the red-tailed leafhopper. It requires prairie dropseed (as do several other prairierestricted insects). This grass is rather exclusive to remnant prairie sod or restoration plantings. In another example, there are six species of moths that appear to only live on leadplant. Because of leadplant's conservative nature, these are all considered prairie-dependent insects (see article "One Plant at a Time" in this issue).

Of course, not everything is so clear cut. For example, the tumbling flower beetle, *Mordellina impatiens*. We know nothing about its host(s), but so far it has only been found in prairie and savanna remnants, thus it is catalogued, for now at least, as remnant-dependent. We also do not know what the moth *Eoreuma crawfordi* eats, but it has only been found in prairie remnants, and all known locations are within the heart of the continent's prairie region, so it is also considered a remnant-specialist. These are just a few examples. There are many, many more.

You may be wondering, just what is the usefulness of this concept of prairie-dependency? There are two primary applications. First, it is useful in setting conservation action priorities. Restricted insects are limited on the landscape and, thus, at greater risk of disappearing. Knowing that such species are present heightens a remnant's conservation significance beyond just the vegetation and rare plants. Second, a minority of the insects found on prairies have some level of sensitivity to fire (and other management activities). Although most of these do recover within one year after fire, a small portion takes two or more years to rebound.

Knowing which of these most sensitive of species are also remnant-dependent and, thus, may have trouble recolonizing if lost from an isolated remnant, helps guide management decisions about how much to burn and how often.

Just how many insects are prairie-dependent? Ron Panzer et al. (2010) estimated from their work in the Chicago area that approximately 15% of the insects using prairie remnants may be remnant-restricted. This translates into a conservative estimate of approximately 2,000 prairiedependent insects in our region (Wisconsin, northern Illinois, eastern Iowa, and southeastern Minnesota). Some of these insects are highly mobile species and produce many offspring each year and, thus, can find and colonize new prairie plantings or remnants within a year or two. Others are more conservative, less mobile, slower to reproduce, and rare on the landscape. They may take decades to find new areas of habitat (such as restorations). These are the ones in greatest need of attention. As pointed out, our knowledge as to what species are truly prairie-restricted is limited. For some species, we have confidence in their host-specificity, and for others far less so, at least until more investigation and observation is done. There is ample opportunity for interested "citizen scientists" to get involved to help.

Through my work with the Wisconsin Department of Natural Resources, I will soon be putting out a working list of prairie-restricted insects (along with their known hosts) that are known, or likely, to be in Wisconsin. It has only 425 species at this time (far short of the 2,000 estimate for the region), so it needs much input. The purpose of this list is to stimulate interest, by professionals and amateurs alike, in looking for these species so we can obtain a better understanding of their status and distribution, remnant-dependency, and host specificity. I also hope it will stimulate specialists and experienced amateurs to submit nominations for additions to the list. Over time, I anticipate species will be added to the list but some dropped as we learn more.

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Strawberries and Roses

By Rich Henderson

The original prairies of the upper Midwest had a great abundance of wild roses and wild strawberries, especially in the deep soil mesic and wet-mesic prairies. The ubiquity and abundance of these two taxa was a common theme in the written accounts of the earliest non-native explorers, travelers, and settlers entering the prairies of our region. There are accounts of horse hooves and wagon wheels becoming red from ripe strawberries and how easy it was to collect large quantities of berries to eat, and they commented about the endless rose flowers in June.

These observations are backed up by more recent plant surveys as well. Data collected in the 1940s and 1950s from the last of the prairie remnants in Wisconsin by the University of Wisconsin-Madison Plant Ecology Laboratory for J.T. Curtis' *Vegetation of Wisconsin*, found wild strawberry to be the third most abundant species in wetmesic prairie (89% of stands; 36% of 1 m² quadrats), and the 10th most abundant in mesic prairie (75% of stands; 30% of 1 m² quadrats). Wild roses were even more prevalent. They were the most abundant species in mesic prairie – that's right 1st – (91% of stands; 53% of 1 m² quadrats), the 5th most abundant in wet-mesic prairie (85% of stands; 34% of 1 m²quadrats), and the 19th most abundant in dry-mesic prairie (88% of stands; 13% of 1 m² quadrats) (*Henderson 1995*).

How many prairie restorations can you think of that have this abundance of roses and strawberries? I suspect not many. These species have been chronically under-used in restorations. Roses have been planted more than strawberries, and they are gaining a foothold in some sites, but nothing like the densities in our original prairies. The reasons for this underplanting include scarcity of large populations to collect from and the high labor demands to collect berries, clean/ process rose hips, and propagate strawberry roots in tended beds and then out-planting them. The under-representation of these taxa in our restorations is just another example of how challenging it is to reestablish a plant community close to the original prairie, and shows that it is going to take a long time to reach that goal. The moral of the story is to keep working on those plantings and, even more important, cherish and protect those remnants! They are invaluable to our understanding of prairie.

Henderson, R.A. 1995. Plant species composition of Wisconsin prairies: an aid to selecting species for plantings and restorations based upon University of Wisconsin-Madison Plant Ecology Laboratory data. WI Dept. of Natural Resources Technical Bulletin No. 188. 58 p.

Snowy Owl Visits Schurch-Thomson Prairie

by Rich Henderson, Mark Martin and Sue Foote-Martin

On March 19, an adult male snowy owl, named Goose Pond, arrived at The Prairie Enthusiasts' Schurch-Thomson Prairie at approximately 7:30 AM, where he spent the day just hanging out on a fence post. He departed the preserve at approximately 8:00 PM that night. How do we know these details? Goose Pond happened to be fitted with a transmitter that sent data of his movements to a cell tower. He is part of a snowy owl monitoring program called Project SNOWstorm (www.projectsnowstorm.org), and location information on Goose Pond can be found on the website. The project is attempting to learn more about the snowy owls that come south from the tundra into the U.S. to spend the winter.

Goose Pond was trapped at the Central Wisconsin Airport in Mosinee and released 104 miles south at Madison Audubon's Goose Pond Sanctuary near Arlington, WI, on February 13, 2015. Madison Audubon supporters provided

funds for the 1.5-ounce transmitter that included a solar panel, battery, and GPS system that records location data every 30 minutes, and a device that calls in that data to cell towers.

The relocation was part of ongoing efforts to remove snowy owls from airports, where they are at risk of striking planes, and are a research effort by Project SNOWstorm and its partners into the movements of relocated owls. Goose Pond was released into hundreds of acres of restored prairie, wetlands, and pastures, including the Goose Pond Sanctuary and the University of Wisconsin Agricultural Research Station. Goose Pond preferred hunting pastures where small mammals were easier to find than tall grass prairie restorations. He also spent six days on the ground in a picked cornfield where he may have fed on a Canada goose.

On the evening of March 18, Goose Pond apparently developed wanderlust and departed the Arlington area at approximately 10:15 PM for a tour of the Driftless Area. He headed southwest in pretty much a straight line, ending up at Schurch-Thomson Prairie (36 miles as the owl flies) approximately 9 hours later at around 7:30 AM on March 19, where he then spent the day. Upon leaving Schurch-Thomson Prairie, he meandered his way westerly into southern Grant County, Wisconsin, and ended up about four miles northeast of Dubuque, where he last called in on March 29th.





Photos by Richard Armstrong

Monitoring & Management — A Sensible Pairing

by Beth Goeppinger WI DNR Naturalist, Richard Bong State Recreation Area

Richard Bong State Recreation Area is a heavily used 4,515 acre property in the Wisconsin State Park system. It is located in western Kenosha County. The area is oak woodland, savanna, wetland, sedge meadow, old field, and restored and remnant prairie. Surveys of many kinds and for many species are done on the property—frog and toad, drift fence, phenology, plants, ephemeral ponds, upland sandpiper, black tern, grassland and marsh birds, butterfly, small mammal, waterfowl, muskrat and wood ducks to name a few. Moths, except for the showy and easy-to-identify species, have been ignored.

That is until volunteer moth surveyor, Steve Bransky, came onto the scene. Steve, a member of the Wisconsin Entomological Society, had done a few moth and butterfly surveys here and there on the property. But that changed in 2013. Armed with mercury vapor lights, bait and a Wisconsin scientific collector's permit, along with our permission, he began surveying in earnest.

Steve chose five sites in woodland, prairie and savanna habitats. He came out many nights in the months moths might be flying. After finding that moth populations seemed to cycle every 3-5 days, he came out more frequently. His enthusiasm, dedication and never-ending energy have wielded some surprising results. Those results have in turn, guided us in our habitat management practices.

Of the 4,500 moth species found in the state, Steve confirmed close to 1,200 on the property, and he isn't done yet! He found one of the biggest populations of the endangered *Papaipema silphii* moths (Silphium borer) in the state as well as 36 species of *Catocola* moths (underwings), one of the densest and most diverse populations in the state. Six confirmed state records, over one hundred range extensions and over sixty county records make the monitoring even more impressive.

So what does all that have to do with management? Obviously the way we have managed in the past has created appropriate habitat for these species. Mowing and prescribed burning and invasive species removal is our management regime. We try to burn each habitat unit on a three-year cycle but due to budgets and weather that often turned into 5-7 years which as it turns out, was beneficial to the insects.

There has long been a balance in prescribed burning, native habitat must be maintained and burning is the most efficient way to do that but you also don't want to burn too much and negatively affect the insect life. What the monitoring has helped us do is change and fine-tune our management strategies to better benefit the insects as well as the habitat.

We now make sure we have unburned habitat around the edges for recruitment. We mow some of the higher quality remnants more frequently than we burn them. We will also purposely try to leave unburned spots around host plants in places these populations are or could be. The monitoring data has also affected our brushing decisions for instance, *Catocala crataegii* (Hawthorn Underwing) needs hawthorn, which is present but not in large numbers. To that end, we are focusing on planting and keeping larger blocks of hawthorn.

They say that knowledge is power and I think that is true. We were lucky before in our management but now that we know the amazing diversity of moths on the property, we can consciously and effectively manage for all the resources. You have to know your site, whether it's birds, plants, mammals or insects before you manage it, not just burn it all. Now, I realize not everyone is lucky enough to have access to a moth expert but perhaps you could contact a local university or museum or resource expert to do some monitoring, or you could bait and take photographs for identification. Just get out there and collect data to help guide your decision making, it makes good sense.



Jim Schulz - Colates Sp. (Finalist in 2015 TPE Photo Contest)

Spring 2015

2015 TPE Annual Conference

By Scott Fulton

The 2015 TPE Annual Prairie Conference and Banquet was held at the University of Wisconsin – Stevens Point campus on March 21. The theme of this year's conference, hosted by the Prairie Sands Chapter, was "Connections", based on a quote by John Muir – "When we try to pick out anything by itself, we find it hitched to everything in the Universe".

The conference program opened with a world premier showing of a nearly completed new video to be called "Prairie Enthusiasm", which features TPE members talking about managing, learning about and protecting prairies and oak savannas. The video project was sponsored by TPE under the leadership of Karen Agee, Scott Fulton, Gary Eldred and Mark Leach, and was filmed and edited by Joe Maurer. The final product will soon be available on the TPE website and for public showings, and is being considered for airing on public television.

The program included a very diverse range of talks. Highlights included a fascinating talk by Marcie O'Connor on her work studying the species on the property she and her husband Mike have been restoring in western Wisconsin, with a particular emphasis on moths. Mike later showed an amazing video and demonstration of the use of drones as a land management tool. Concurrent sessions included a wide range of talks on insect and plant-insect relationships, the

history of oak savannas and of the Greene Prairie restoration at the University of Wisconsin – Madison arboretum. The formal program concluded with a very lively and informative panel discussion on oak savanna restoration, which provoked a great deal of audience comment and response.

As usual, the conference included the popular silent auction and raffle (overseen by Evanne Hunt), with the proceeds going to support chapter activities. After a social mixer, the conference concluded with a wonderful banquet. The dinner speaker was Heather Holm, author of *Pollinators of Native Plants*, who spoke on "Native Bees and Predatory Wasps of Prairie Ecosystems."

Many, many thanks to the TPE Prairie Sands Chapter for planning and directing all of the aspects of the conference program and banquet. The Conference Chairs were Shelley Hamel, Karen Wollenburg and Jean Clark. Other key volunteers from the Chapter included Neil Diboll, Mary 'Ray" Goehring, David Hamel, Fred Wollenburg, Betsy Kerlin, Charlie Church, Laurel Bennet, John Shillingshaw, Cathy Franks, Joan Voigt and Nancy Katzbeck. Sean Piette and Lucas Joers from UW-Stevens Point also volunteered to help with the conference. Thanks also go to the TPE staff members Chris Kirkpatrick, Joe Rising and Jerry Pedretti for helping with arrangements.

Thank You to our Conference Sponsors





















Photos by Joe Rising & Evanne Hunt

CHAPTER NEWS

COULEE REGION CHAPTER

The Coulee Region chapter meeting on May 16 will include a presentation and hike on the topic of bluff prairie soils by Peter Hartman (NRCS-retired). Check the chapter website or field trip flier for details, or contact Jim Rogala (608-786-1855; therogues@charter.net).

EMPIRE-SAUK CHAPTER

Summer Interns

By Rich Henderson

This summer, the Empire-Sauk Chapter will have a crew of 6 interns for 12 weeks, starting May 26. As with last year, they will be splitting their time among Mounds View Grassland (Schurch-Thomson, Shea, and A to Z units), Pleasant Valley Conservancy, Black Earth Rettenmund Prairie, West Dane Conservancy, Pleasure Valley Conservancy (including Parrish Savanna), Erbe Grassland, Powell Prairie, Kalscheur Savanna, and possibly another location or two. Support for the interns comes from Prairie Enthusiasts land management endowments (including the Olive & John Thomson Intern Education Endowment and the Schurch-Thomson Prairie Endowment), rent from agricultural lands on our preserves, and donations. Additional support comes from the Savanna Oak Foundation (Tom & Kathie Brock), West Dane Conservancy (Doug Steege & Kristine Euclide), and Pleasure Valley Conservancy (Ken Wade & Pat Trochlell). This is our ninth season of hosting interns.

The interns, while in the Mounds View and Erbe Grassland area, will be headquartered at the Schurch-Thomson Prairie barn. Rob Baller will once again be the staff restoration ecologist for this area to direct, guide, and inform the interns. Rob is a naturalist and longtime TPE member active with the Prairie Bluff Chapter. He has much experience in natural area management, restoration, and environmental education. We are very pleased he was able to join us again this summer. The crew's work at Pleasant Valley Conservancy will be directed by Tom & Kathie Brock and Amanda Budyak, at West Dane the crew will be directed by Doug Steege & Larry Sheaffer, and at Pleasure Valley the crew will be directed by Ken Wade.

This summer's interns come from various universities and backgrounds. They are Grace Vosen (Northland College, Natural Resources & Biology majors), Shala Brehm (UW-Madison, Wildlife Ecology major), Keith Phelps (UW-Madison, Environmental Studies major), Isaac Bailey (UW-Madison, Environmental Studies & Biological Aspects of Conservation majors), Natalya Walker (UW-Madison, Environmental Studies & Zoology majors), and Jasmine Wyant (UW-Platteville, Reclamation and Environmental Conservation major). We are pleased to have such an engaged enthusiastic group for the summer.

If you would like to work alongside the interns from time to time, share your experience & knowledge and learn how they became interested in conservation, contact Rich Henderson (845-7065 or tpe.rhenderson@tds.net).

In Memory of Todd

By Rich Henderson

In February, the TPE Empire-Sauk Chapter lost one of its most stalwart volunteers, Todd Casanova. He passed away after a long battle with ALS (Lou Gehrig's Disease). After being diagnosed, Todd stayed active with TPE doing what he could, often with help from his sons, Jason and Ryan, and support from his fiancée, Candace Peterson.

Todd spent most of his TPE volunteer time at Smith-Reiner Drumlin Prairie and the Mounds View Grassland, He also served on the land management committees for both sites. Todd took great joy in controlling invasive plants, burning, collecting and cleaning seed (preparing rose hips was a specialty of his), working in the seed orchards, and growing plants in mass quantities, including seemingly endless amounts of both prairie and Turk's-cap lilies. As Candace and his sons can attest, Todd loved growing seedlings for restorations and seed production beds. He had real talent for it (see picture). He also took great joy in seeking out the fruits of his labor, getting out to look for plants establishing and blooming for the first time in the restoration projects. Todd was always looking to the future, and he maintained his optimism and engagement to the end.

Years from now, when there are 500 acres of prairie lilies at Mounds View, we will all have Todd to thank. His enthusiasm for our conservation mission was catching. Todd will be greatly missed by all who knew and worked alongside him, not only for all he did, but also his positive attitude, sense of humor, and friendship. Thank you, Todd.

Todd bequeathed his truck and all of his seedling root trainers to TPE for the chapter to use in land management. He also asked that any memorials be made to TPE Empire-Sauk Chapter "in Memory of Todd Casanova."



Photo by Karen Agee



Photo by Todd Casanova

Chapter Volunteer of the Year – Jane Graham

by Diane Hills, Volunteer Coordinator

The Empire-Sauk Chapter is pleased to recognize Jane Graham as our 2015 Volunteer of the Year. Just a year ago, Jane contacted us introducing herself as a retired elementary school teacher working on her Master Gardener Certificate. Jane and her husband, Dennis, were looking for places to hike near their home in Cambridge, WI and learned about TPE's nearby Smith-Reiner Drumlin Prairie State Natural Area. She wanted to volunteer. Once Jane stepped out into the prairie, the rest became history.



L to R: Peter Thomford, Jane Graham & Gary Birch Photo by Denny Connor

After her first walk on the drumlin with Dennis, Jane sent an email describing the locations of flowering plants along with the birds they had seen. She also announced, "Now that it stopped raining, we are going on another trip to Smith Drumlin to take some photos and try to mark the location of the plants on paper." This was the first of many e-mail reports and inquiries to follow.

The next week, she purchased 100 red flags to mark plants to relocate for seed collecting and asked us to recommend some good books, websites or other resources. Shortly thereafter, she was out conducting bird surveys with Gary Birch, another outstanding volunteer at the preserve. She then vigilantly took on weed patrol/control duties, then seed collection/planning at the preserve. Jane has also been working with Gary to survey what plants are coming into the new plantings and helping with brush control.

With her enthusiasm for prairies growing, Jane has also discovered two other small remnants in the Cambridge area that are now being used as seed sources for work at Smith-Reiner. One day, she met Todd Casanova out on the drumlin, and they talked about methods of germinating prairie lilies. Determined as always, she now plans to germinate the lilies at her home for planting at Smith-Reiner.

Although Jane is not a trained naturalist, she has a strong desire to learn and contribute to the restoration of this rare drumlin prairie. She has quickly become a true prairie enthusiast and is looking forward to the upcoming field trip at Smith-Reiner this Mother's Day. Thank you, Jane!

Volunteers Needed to Propagate Missing Species

The Empire-Sauk Chapter is looking for volunteers to establish and tend propagation beds and collect and process seed of prairie plants that are vastly underrepresented in our restoration projects. These include species such as strawberries and roses (see article in this issue), prairie violet, blue-eyed grass, yellow star-grass, violet wood sorrel, hoary puccoon, northern bedstraw, and false toadflax. The main hub of the work will take place at Schurch-Thomson Prairie (part of the greater Mounds View Grassland); however projects and efforts may be started up elsewhere. And the program can also be expanded to serve more sites such as Smith-Reinier Drumlin, Erbe Grassland, and others. Interested? Contact TPE volunteer coordinator Diane Hills (volunteers@theprairieenthusiasts.org).

Monarch Monitors Needed

As you may be aware, monarch butterfly populations have been in major decline over the past decade or so. What you may not be aware of is a national effort to have volunteers (Citizen Scientists) collect data to help bring back the monarchs. It is called the Monarch Larva Monitoring Project (http://www.mlmp.org/). The Empire-Sauk Chapter wishes to document monarch use of the preserves we manage, and assisting this national monitoring effort is a great way to do so. Not only will the data collected help with national conservation of monarch butterflies, but it will also help us make decisions about where to focus our limited management resources, such as more milkweeds for the larvae or more nectars sources for the adults. If you wish to help find and monitor monarch larvae on our preserves, please contact TPE volunteer coordinator Diane Hills (volunteers@ theprairieenthusiasts.org). She will put you in touch with site stewards with whom you can coordinate efforts.

NORTHWEST ILLINOIS CHAPTER

See our website <u>www.nipes.org</u> for chapter news.

PRAIRIE BLUFF CHAPTER

by Tom Mitchell

We are excited to announce our intent to purchase another remnant prairie, Avon Ridge, which will become the sixth property that our chapter manages for The Prairie Enthusiasts. This site has thousands of pale purple coneflowers (Echinacea pallida) and offers views of the Sugar River valley and Avon Bottoms in Rock Countty. See the fund-raising insert in this issue to see how you can help.

Prairie Bluffer Steve Hubner won first place in the Photo Contest at TPE's annual conference and banquet in Stevens Point. His picture of the autumn colors at Butenhoff Prairie featured the reds and golds of the fall season and illustrates why they call it "showy goldenrod."

Thanks to chapter members Marci Hess, Dan Gartzke, Tracey Schwalbe, Frank Grenzow, Chuck Wellington, Mike Davis, MJ Hatfield, Linda Uttech, Rob Baller, Jim Hess and the Lafayette County Bluebird Society, and Minhas Brewery for their unique donations to the raffle and silent auction. Thanks to John Ochsner for his traffic sign and to Nick Faessler for his skid-loader and brush mowing.

We held our 4th annual Fire Crew Refresher in March, and in accordance with the TPE burn policy we covered lessons learned from the last burn season. Our winter workdays were spent at Muralt Bluff Prairie, where we removed trees and brush from the steep north-facing slope, created a southwest passage to the far west end above the ravine, and improved our access to South Muralt.

SOUTHWEST WISCONSIN CHAPTER

Sylvan Road Update

by Linda Lynch

A prescribed burn earlier this spring was the latest in the restoration activities at the Sylvan Road Conservation Area. Since acquisition by TPE last year, there have been a lot of changes in the landscape, including:

- Clearing fire breaks around the entire property
- Installing fencing along the property line
- Removal of old fence and posts
- Mowing brush and removing weedy trees
- Constructing a ford across the river
- Completing a prescribed burn

A majority of the work was completed using grants from the North American Wetland Conservation Association (NAWCA), USFWS, Pheasants Forever, and the Turkey Federation. The cooperation of these other conservation organizations has been invaluable to the restoration efforts at the Sylvan Road property. We hope to continue these partnerships as we work on areas that didn't carry fire well and on stabilization of the stream banks. This spring's prescribed burn went well and the various areas; woodland, wet meadow, wetland, and uplands are responding and you should expect to see an incredible flush of forbs and grasses.

ST. CROIX VALLEY CHAPTER

by Evanne Hunt

Thanks to our burn crew members for the Blueberry Hill and the Foster Conservation Area burns! Be sure to come back this summer and see the effects!

> Landon Acre-Kendall Coleen Anderson John Arthur Dave Middleton Myron Mortell Eric Sanden Patrick Fleming Elsa Litecky Bob Lorenzen Kelsey Trina Lynette Anderson Lance Wilson Mike Miller Peter Ebertowski Wayne Hunhke Greg Brown Louis Neal Jarod Blades

Please check your email and our chapter Facebook page for "pop-up" field trips. We plan to take advantage of whatever is blooming. https://www.facebook.com/TPESCV

WELCOME NEW MEMBERS!

The following people have joined TPE during the period January 8 – April 21, 2015

James & Elizabeth Baranski, Galena, IL
Harriet Behar & Aaron Brin, Gays Mills, WI
Nancy Bentley, Rochester, MN
Don Bushek, Plymouth, MN
Kathleen Casper, LaCrosse, WI
Joyce Cielecki, Trempealeau, WI
Virginia Coburn, Whitewater, WI
Bryan & Christina Cressey, Barrington, IL
Thomas Cunningham & Susan Lipnick,
Galena, IL

Kevin Dewan, Madison, WI
Susan Eisele, Mt. Horeb, WI
Roger Smith, Waunake
Wade Gibson, Dubuque, IA
Karin Hyler, Stevens Point, WI
J. Muller B Photos, Warren, IL
Bonita Kuenzi, Madison, WI
Pharm-Aloe, Inc, John Seiler, Woodford, WI
Fred Retzlaff, Milwaukee, WI
Ryan & Lily Rodgers, Osceola, WI
Thomas Romaine, New Ulm, MN

Adam Romanak, Milwaukee, WI Roger Smith, Waunakee, WI Marriah Sondreal, Viroqua, WI Standing Cedars Community Land Conservancy, Osceola, WI Jay Watson, Maribel, WI Jim Weber, Avoca, WI Keith Wilcoxson, Oswego, IL Janice Winter, Neshkoro, WI

THANK YOU DONORS

We thank everyone who made a donation to The Prairie Enthusiasts during the period January 8 – April 21, 2015. These gifts above and beyond membership dues and the annual appeal are truly generous and appreciated.

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