



THE PRAIRIE PROMOTER

VOL 14, NO.3 Fall 2001

Celebrating thirteen years of prairie conservation in the Upper Midwest

MARK YOUR CALENDARS NOW!



The time is none too soon to mark your calendars for March 8th and 9th 2002 when our next banquet and conference will be held at the University of Wisconsin, LaCrosse!!!

The Coulee Region Chapter is pleased to announce that Dr. Curt Meine has agreed to be the keynote speaker for next years "Prairie LaCrosse" conference. Dr. Meine is Director of Conservation Programs at the Wisconsin Academy of Sciences, Arts and Letters in Madison, Wisconsin. He has worked extensively as a consultant on biodiversity conservation, sustainable agriculture and community-based conservation at the local, national and international levels. He is also active in local conservation efforts as chair of the Community Conservation Coalition for the Sauk Prairie in Sauk County, Wisconsin. Dr. Meine is also author of the biography *Aldo Leopold: His Life and Work* (1988), editor of the collection *Wallace Stegner*

and the Continental Vision: Essays on Literature, History, and Landscape (1997) and co-editor with Richard L. Knight of *The Essential Aldo Leopold: Quotations and Commentaries* (1999). Dr. Meine is a member of the Crane Specialist Group of the World Conservation Union (IUCN) and a Research Associate with the International Crane Foundation in Baraboo, Wisconsin. With George Archibald he co-authored *The Cranes: Status Survey and Conservation Action Plan* (1996). We are certain that the insights he will bring to our gathering will serve well to kick off another exciting conference. The Coulee Region is in the process of designing a conference which will feature "tracked" presentations which will allow members with special interests to attend a sequence of presentations. Efforts are being made to provide technical as well as more general sessions. We also are in the process of arranging a very special field trip.

FIND THOSE AUCTION AND RAFFLE ITEMS NOW!

Take advantage of this once a year fund raising event for your chapters. We, Coulee Region Chapter, will get the license; set up the tables and help you get extra cash. You only have to supply the goods. More details will be in the mail soon to all chapter auction/raffle coordinators. Thank you!

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The Prairie Enthusiasts is a grass roots organization of volunteers which is solely committed to the protection, management, and restoration of native prairies and savannas in the Upper Midwest. To date, The Prairie Enthusiasts has protected over 2,000 acres that harbor at least 5 state or federally protected species requisitions, easements, and management agreements. The Prairie Enthusiasts has a stewardship program which provides active management to ensure the ongoing health of protected sites.

The Prairie Enthusiasts is actively involved in planting prairie on its properties and on other conservation lands and has assisted both public agencies and private groups in these efforts. Thus far, more than 150 acres have been planted with seeds of prairie plants from local sources.

In addition, The Prairie Enthusiasts develop educational materials and provide presentations on prairie and savanna ecology, conservation, and management for both children and adults.

The Prairie Enthusiasts 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.

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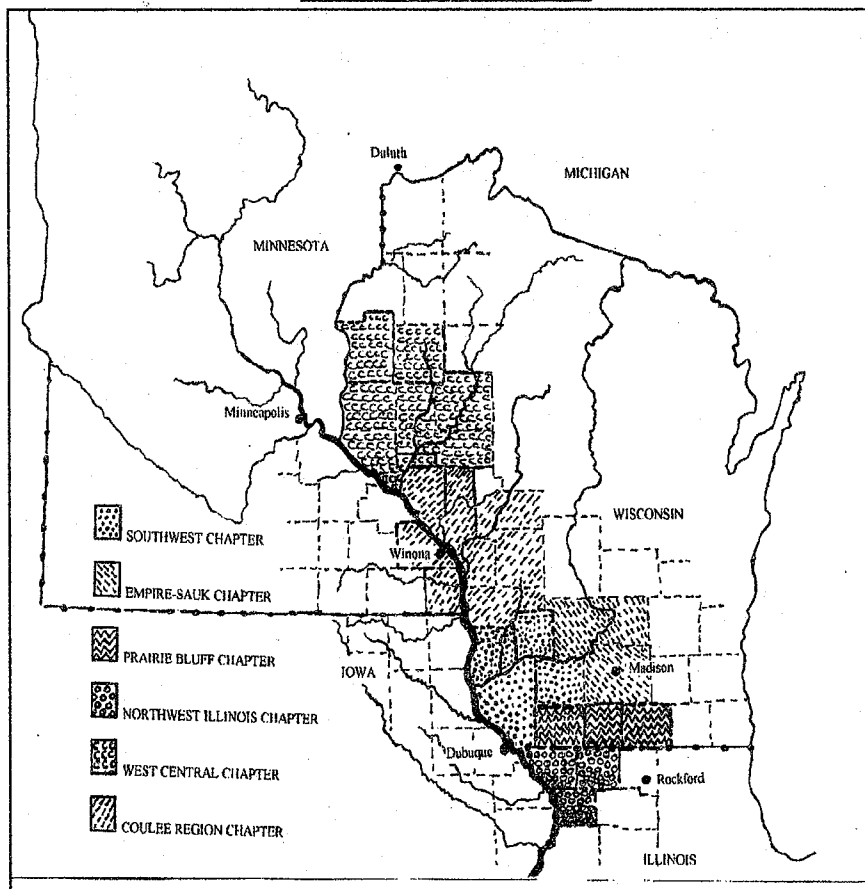
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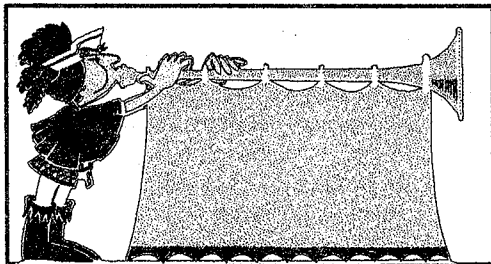
President's Message

Another growing season is beginning to wind down, at least for many people. But not for those of us on the front line of prairie conservation. While spring is filled with hectic activities such as burning and planting prairies and savannas, fall is even more active. Many species of native plants are laden with ripe seed that waits for no one. The last of fall planting site preparations are underway, and by freeze-up, new prairies will have been planted. Fall burns are being planned, and fingers crossed that the weather will cooperate.

This past summer also has been a busy and good one for TPE. Again this year, Rich Henderson put together two impressive field trip schedules with dozens of varied field trips to fit everyone's interests and schedules. This summer I promised myself I would attend more field trips and I did. What a treat they were: the Savanna Depot field trips, Blufflands Project picnic, weekend trips to NE Iowa and visits to prairie planting projects as well as high quality remnants being restored throughout Wisconsin and Illinois. I've said this many times and each time I am even more convinced that the people who are doing the work are completely dedicated, committed, passionate, optimistic, creative and tireless. Like a pit bull, our members literally have locked onto an idea and can't let go. I'm truly amazed and humbled by you, our dedicated members. Thank you so much!



ANNOUNCEMENTS



HOLD YOUR CALENDARS NOW!

11th Annual Prairie Invertebrate Conference

The conference will be held at Luther College, Decorah Iowa on Saturday, November 3, 2001. This

conference focuses on extending awareness of prairie associated species, their taxonomy, natural history and distribution. The conference is directed towards resource managers, scientists and all who seek to better understand prairie ecosystems. For further information, contact Andy Larsen at Riveredge Nature Center, 262-375-2715, e-mail andylnam@aol.com.

T.P.E. Annual Conference and Banquet

Mark your calendar for the 14th annual TPE banquet and conference, "Prairie LaCrosse", to be held March 8 and 9, 2002 at the University of Wisconsin, La Crosse. The Coulee Region Chapter is looking forward to hosting a lively get together for all you passionate prairie people. See page one for more details.

Book Review

By Robert Baller

Icons of Evolution Science or Myth? Why

much of what we teach about evolution is wrong.

Jonathan Wells. 2000. Regnery Publishing, Inc.

Washington D.C. 333 pp. ISBN 0-89526-276-2.

"In this shocking book, Berkley-educated doctor of biology Jonathan Wells lets you in on scientific discoveries you won't learn about from college and high school textbooks – and reveals a dirty little secret known only to some of his fellow biologists.

The best-known "icons" of evolution – from pictures of apes evolving into humans, to comparisons of fish and human embryos, to moths on tree trunks – are false or misleading. For decades, biology students have been taught things about evolution that are simply untrue.

These icons of evolution appear even in the most recent textbooks, although the scientific literature is full of evidence that they are false. Apparently, dogmatic promoters of Darwinian evolution fear that without these icons public faith in their claims will disappear, so they knowingly misinform our children and suppress scientific evidence."

So fumes the inside jacket of *Icons of Evolution*, the new polemic work by Jonathon Wells. Wells, a senior fellow at the Discovery Institute, provides 10 examples, termed "icons", which help him make his case that many of the basic arguments favoring Darwinian evolution are wrong. Among the icons are:

A: a picture of a laboratory flask simulating the Earth's primitive atmosphere, with sparks suggesting lightening,

producing the chemical building blocks of the first living cells;

B: the evolutionary tree of life as originated by Darwin, symbolizing development through time of a single progenitor into many species;

C: the concept of homology, in which anatomical structures (in different species) are similar to each other due to their evolutionary descent from a common ancestor;

D: drawings of embryos of various species, appearing similar to each other due to their relation to a common ancestor;

E: the famous (or infamous) "drawings of ape-like creatures evolving into humans, showing that we are just animals [whose] existence is merely a by-product of purposeless natural causes."

Wells delineates these and other 'misconceptions' with respectable skill. Chapter by chapter he provides excellent history surrounding each icon, lucidly bringing the reader to the present and showing why each icon no longer should be considered valid. It is here, in Wells' descriptive abilities, that I feel he is at his best; he appears to be a fastidious researcher and a superbly articulate writer, explaining complicated subjects at a non-technical level for the layman. Whatever one eventually concludes about his book or evolution, one cannot help but be impressed by his dexterity with the details.

The laboratory flask is the example I will condense for this review. According to Wells, the flask is symbolic of the famous 1950's experiments by Nobel-prize winning chemist Harold Urey, and his Chicago University graduate student Stanley Miller. Under Urey's direction Miller attempted to replicate an early, oxygen-free atmosphere of the Earth in the laboratory, and by sparking it for a week he succeeded in creating amino acids. Wells continues the story with further investigations in the field of the-origin-of- life, and reaches the 1980's, where geo-chemists (as a group according to Wells) conclude that the early atmosphere probably contained oxygen, thus rendering the development of amino acids through the Miller-Urey process improbable, if not impossible. Now Wells reveals his recurring irritation with the biologist faction in the evolutionary debate, as according to him the biologists still collectively use the Miller-Urey experiment to imply that early Earth *must* have been oxygen-free, since life did form and, according to experiment, only an oxygen-free atmosphere would work. Wells sees this as cart-before-the-horse logic, which indeed, it appears to be. Wells' portrayal of the geologic consensus appears sound; early Earth probably supported an oxygenated atmosphere; there must be another cause of early life, as yet unknown. Not all of his chapters are convincing in their argument; this one is.

From this and the next several chapters we get an impression that Jonathan Wells is an exacting thinker,

rooted in the search for truth and allied with the principles of science. He appears greatly disappointed by the lack of rigorous standards for Darwinian concepts, and apparently has written *Icons* to set things straight.

Later on, however, we find an increasing number of subtle (and as I interpret, unintentional) omissions and misrepresentations on Wells' part that cause one to re-evaluate his motives. An uninformed reader may never find the omissions, as in many cases one first must have considerable knowledge of evolutionary theory to recognize Wells' tailoring. The reader must search these out for himself, for they are many and quietly couched in the book. I will provide one example below.

In Chapter 12, Wells takes up the recent public controversy surrounding the Kansas School Board. *"In 1999, when the Kansas State Board of Education was considering new statewide curricular standards, the strongly pro-Darwin members of a writing committee proposed a nine-fold increase in the coverage of evolution compared to the 1995 standards. They demanded that biological evolution be made one of the "unifying concepts and processes" of science...They also wanted students to "understand" that large-scale evolutionary changes are explained by natural selection and genetic changes."*

"The Kansas board increased the treatment of evolution five-fold over the previous standards, but rejected the writing committee's demand to install biological evolution as a unifying concept of science. Some Board members wanted to include the Darwinian explanation for large-scale evolution as long as students were exposed to evidence against it; but when pro-Darwin Board members refused to agree to this, the topic was omitted. Dissatisfied with outcome, the Darwinists informed the major news media that the Board had eliminated evolution entirely. Some new reports even claimed – falsely – that Kansas had prohibited the teaching of evolution or mandated the teaching of biblical creationism." (pp. 238-39)

By this account, we gain the image of a Writing Committee, not advocating or recommending Evolution, but *demanding* it. The Kansas Board increased evolutionary teaching *five-fold*, but still the Committee refused to compromise (dishonorably) because it would include providing evidence contradicting Darwinian theory; when the Darwinists don't get their way, they cry wolf over creationism. A reader perusing this book may unwittingly accept this interpretation, since Wells provides only this side. But most watchers of controversy know there are usually many sides, and careful readers will pause when Wells employs undefined terms such as *five-fold increase*, and *large-scale evolution*.

To gain insight one must turn past the text and find the *Research Notes* in the back of the book. There, along with his ample references, is an editorial by Wells

in *The Daily Republic* (Mitchell, SD), October 14, 1999, addressing the Kansas controversy. He writes "The old science standards, in effect since 1995, devoted about 70 words to biological evolution. Standards proposed to the Board earlier this year by a 27-member Science Education Standards Writing Committee would have increased this to about 640 words. The standards actually adopted by the Board on August 11 include about 390 words on the subject. So the Kansas State School Board, asked to approve a nine-fold increase in the standards for evolution, approved a fivefold increase instead." (p. 328)

It is only here that we realize the 1995 Kansas standards allowed roughly *one* paragraph on evolution. The Kansas Board generously expanded it to the equivalent of 5 paragraphs. Continuing in the editorial, we find that Wells apparently splits evolutionary theory into 2 parts: micro and macro. Micro-evolution, in his context, refers to the genetic diversity visible in everyday life, as illustrated by the breeding of plants or animals. Macro-evolution refers to the rise of entirely new species through the process of natural selection, as predicted by Darwinian theory. By dividing evolution into two parts, micro and macro, Wells could claim the Kansas Board accepted evolutionary theory, while quietly discarding its most important part, the origin of species.

Virtually absent from the text is Wells' position on Darwinian Evolutionary Theory as a whole. He never supports or rejects the theory with direct words, he only criticizes it by disagreeing with the popular icons. His barbs against the icons and "the establishment" are many, and they become increasingly pointed and more loosely aimed toward the end, yet he reveals no opinion on the whole theory, and rarely posits alternatives. His aim solely seems to destroy Darwinian evolution.

Therefore I turned to the Internet to inquire into his senior fellowship at the Discovery Institute, as listed on the cover jacket. The Discovery Institute – Center for the Renewal of Science and Culture (CRSC) is an organization based in Seattle, WA dedicated to finding evidence proving something called Intelligent Design. Most of its fellows (about 30 men & 2 women) are Ph.D.'s, some of them theologians. The beautiful image on the cover-page is a rendition of Michelangelo's painting of God, a muscular, bearded, white male, with right arm extended, and at his finger's tip, a ball of light followed by the double helix of DNA.

The book leaves me wondering where Wells will go next. His campaign was launched with the battle cry of better science, and he has partly climbed the foothills of Darwinian evidence; But he has not yet, nor is likely, to scale the vast mountains of fossil strata, whose deepest and oldest layers reveal the simplest organisms, progressively gaining in fossil complexity, as they march upwards through the deposits of time. Darwinian Evolution is a world-recognized scientific theory that

unifies 3 billion years of organic history. Wells must now extricate himself from the thin ledge on which he stands, shouting his truth to the masses. And he must do so, it would seem, with the arguments of those who believe with him, that Earth and all its life forms, past and present, can be scientifically explained as the result of intelligent, planned design by an all-powerful, superhuman deity.

Despicable Deeds

By Gary Eldred

It's my sad duty to write this article in response to three despicable acts of treachery and common thievery that have taken place on our precious remnants this summer. One or more as yet unknown people have used T.P.E. and its conservation efforts to gain knowledge of and access to sites, both public and private, to carry out acts of plunder and theft. Three known cases of the unspeakable act of stealing rare plants from protected sites have taken place. The first was the theft of wood lilies from land protected by a U.S. Fish and Wildlife conservation easement near Mt. Hope, Wisconsin. The second act of thievery and vandalism took place in Dane County on private property, right on the owner's prairie remnant next to her home! At least two wood lilies were stolen. The third was also on private property being managed by T.P.E. A high quality prairie remnant was again plundered for wood lilies by someone with absolutely no conscience!

I could go on for pages about how I feel about people who do what these people have done. I personally have given 27 years of my life to make sure that people in the future have a chance to experience the beauty, joy, mystery and wonder of these places and plants. I know without a doubt many people in T.P.E. and outside of it feel as strongly or more strongly than I about this kind of completely selfish, despicable, sneaky behavior. There is positively no room for people like that in my life, and I would hope that anyone who knows the identity of the individuals who committed any of these acts will contact me. I would strongly encourage T.P.E. board members to provide a reward for the arrest and conviction of anyone who digs rare plants!



The Remnants We Save

Underwood Prairie

By Rich Henderson

Location

Iowa County, Wisconsin. Five miles south of Blue Mounds.

Description

Underwood Prairie lies within the unglaciated, or driftless, area of south central Wisconsin. It has two patches of original, dry-mesic prairie sod (7 acres total) separated by a wooded draw. The prairie sits on shallow soil on a gradual south and southwest facing slope of limestone overlaying sandstone, and is imbedded in a landscape of prairie pastures and fallow cropland planted to grass cover in 1988 as part of the federal Conservation Reserve Program. Underwood Prairie is a good quality remnant sitting within a landscape of great significance for grassland bird conservation in Wisconsin. The hundreds of acres of grass cover around the remnant are home to upland sandpipers, bobolinks, western meadowlarks, dickcissels and several species of grassland sparrows, including the state threatened Henslow's sparrow. Badgers and many other species of prairie wildlife use the prairie, including the state threatened red-tailed leafhopper, and many other prairie-restricted insects. Adjacent to Underwood Prairie is Nittany Knoll Prairie (owned by Dennis & Joan Thomson, son of Olive & John Thomson), which we hope to feature in a future segment of The Remnants We Save.

Underwood Prairie is one of only a few prairie remnants in the state that has had minimal, if any, grazing by domestic livestock, at least within the past 80 years or so. Thus it has great comparative scientific value. Ninety species of prairie plants have been found on the site, including large populations of rosinweed, shooting star, prairie dropseed, Leiberg's panic-grass, pomme-de-prairie, and early New Jersey tea. The re-introduction of fire to the site in 1998 correlated with the appearance of two state-threatened species, tuberous Indian-plantain (one blooming plant, 1998) and regal fritillary butterflies (mating pairs, 1999). Both species were previously unknown on the site.

History & Status

The Underwood farm has been in the family since 1888. Their appreciation and stewardship of the prairie is the reason it has survived in such good condition to present day. Thin soil over limestone bedrock is the primary reason the original sod was not plowed, but more of the prairie was left unplowed than soil depth alone can explain. Some of the remnant sod has soil depths that are plowable, and were plowed on other farms. In addition, at one time a fence was put up around the prairie to keep out livestock which had free range of the rest of the farm each fall after the crops were in.

Undetectable from any road, the Underwood Prairie remained unknown to most of the scientific and conservation community until the mid 1980s, when personnel from Prairie Ridge Nursery became aware of the site. In 1987, nursery staff asked me to look at the prairie. The site struck me as very significant, so I promptly submitted a report to the state natural heritage inventory. From 1986 to 1994 Prairie Ridge Nursery managed one of the prairie patches, under lease, for seed production. They cleared some brush and conducted two burns on it in the late 1980s.

In 1998, the Empire-Sauk Chapter of The Prairie Enthusiasts and the UW-Madison Student Chapter of the Wildlife Society started working with the Underwoods to manage the site, and in 1999, a formal management agreement and plan were put in place. The agreement includes not only the remnant sod, but also surrounding former cropland for a total of 17 acres.

Needs & Management

Much tree and shrub encroachment has occurred on the prairie over the past 50 years. TPE and student volunteers and Jeff Underwood have made progress in clearing the trees and shrubs over the past 3 years, but we still have the majority (about 75%) left to go. The goal for the former cropland within the management area is to seed it back to prairie. Approximately 1/3 has been seeded so far. Wild parsnip has become a significant problem on the site in recent years, but persistent cutting and pulling over the past three years is starting to turn the tide.

Some portion of the prairie has been burned each year for the past 4 years resulting in an increase in flowering of both grasses and forbs, and an apparent increase in plant diversity. The legumes in particular seem to be increasing. Many decades of thatch and litter buildup in the absence of fire had most likely resulted in the decline and suppression of many plant species, a situation that the burns are starting to reverse. With continued management, and the help and support of the Underwood family, this important prairie remnant has a bright future.

SUMMER MEMORIES-



A T.P.E. FIELD TRIP TO IOWA!

By Scott Sauer

For the majority of people, Memorial Day represents the start of summer, and the long weekend holiday is a chance to visit relatives or friends, head north to the cabin by the lake or some other variation on the intensive recreation with which we've come to associate our time off. Hardly anyone would make plans to visit Iowa on Memorial Day unless they absolutely had to, and even fewer would purposefully visit the endless fields of freshly planted crops in the northeast part of the state. Yet that is precisely what 19 members of The Prairie Enthusiasts did with their holiday. The group drew on members from as far away as Milwaukee, and included members from at least three chapters.

Now, we didn't cross the Mississippi just to see corn, but to see some of the hidden natural jewels of the Hawkeye State. Our guide was Mark Leoschke, a botanist and naturalist with the

Iowa Department of Natural Resources and one of the leading authorities on the vegetation of Iowa. His experience of traveling across many parts of the state has allowed him access to several hidden natural treasures, and it was through him that our hardy band had the rare chance to see many of the sites we did.

At this point I must make a confession. As many of you no doubt are aware, I am a native Iowan. In fact, I'm a fourth generation native Iowan, and as is the case for many of my ilk, we carry our identity with a mixture of pride and defensiveness. No, not everyone wears a feed cap, and no, there is more to see than corn and soybeans. Such protestations are often made while passing a farmer wearing a feed cap in an ocean of corn and soybeans. It takes a native to find the beauty hidden in such a place, and our guide Mark knew where to find the special places. As is the case with many natural areas, they are hidden in the back forty, or hide behind some unremarkable screen of trees, but the intrepid explorer sometimes finds remarkable surprises by venturing into the seemingly ordinary.

Most of the sites Mark took us to were simply too wet for agriculture, and somehow had escaped tiling and the plow. Our first stop was West Union Slough, and as the name implies, this is a slough near the town of West Union. The site was composed of sedge meadow and wet prairie surrounded by, you guessed it, freshly planted corn. This was one of many sites with large amounts of golden alexanders (*Zizia aurea*), shooting stars (*Dodecatheon meadia*) and prairie phlox (*Phlox pilosa*). Also on display here were large flowered buttercups and swamp saxifrage (*Saxifraga pennsylvanica*).

After lunch at West Union, where Gary Eldred entertained the

locals with his wit and our intrepid party forced the café to lock their doors because they ran out of food (on our account, no doubt), we ventured further on to Brayton Prairie. John Brayton Sr. is a long time member of the Iowa Nature Conservancy, and has maintained a small-unplowed mesic prairie remnant on his farm for many years. After a walk through muddy fields planted with even more corn, we came upon a stunning site. In a shallow draw set between the black-soil fields lay a canvas of green grass speckled throughout with white, yellow, and pink, the colors of shooting stars, zizia, and phlox. These were no mere patches of these plants, but a complete field of all three mixed evenly together. Among other plants here were hoary puccoon (*Lithospermum canescens*), prairie smoke (*Geum triflorum*), valerian (*Valeriana edulis*) and a few cream baptisia (*Baptisia bracteata*). "Rich" is the correct word for this site, and all of us felt we had glimpsed a piece of the past, and were enriched because of it. To think that all the surrounding landscape was once just as beautiful is to ponder the loss caused by our efforts to tame the land.



The first day of our Iowa holiday ended at the small Schroeder Prairie. A wet prairie situated alongside an abandoned railroad bed, Schroeder Prairie,

too was a rich wet prairie, with even more puccoon and prairie smoke than at Brayton Prairie. Here, too, was one of the special plants Mark had hoped to show us. This was the first site where we saw small white ladyslipper orchids (*Cypripedium candidum*) and yellow ladyslippers (*C. calceolus*). But most remarkable of all was a cross hybrid of these two species (*C. x andrewsii* A. Fuller). The flowers of this orchid are intermediate in size between the two parent species, intermediate in number, and also in color, in this case, a startling cream color. The prairie eventually gave way to a very wet sedge meadow that included drifts of sensitive fern (*Onoclea sensibilis*). The weather turned heavy as we left Schroeder Prairie, and we walked back to our cars in a steady rain.



After a night in New Hampton, we started our second day by visiting Daubendieck Prairie. This prairie was also too wet for agriculture, and also too wet for walnut plantings, which surrounded the site and were a welcome change from all the corn. Walnuts had been planted on the site and simply hadn't survived. Half the site was an old field slowly

being invaded by shooting stars and prairie smoke, and the other half was rich wet-mesic prairie with stellar displays of all three orchids. In the gray overcast of the morning, the colors were especially vibrant.

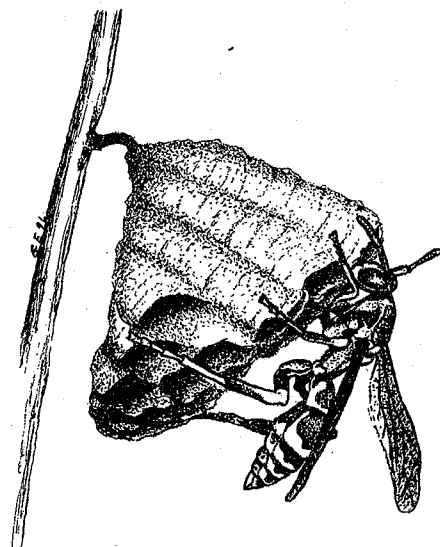
All the sites we visited were remarkable, not just because of the diversity of plant life they contained or their colors, but especially because they still were there to be seen. Iowa is perhaps the most domesticated of the 50 states, and ranks very low in the amount of public land available. In fact, most of the sites we visited were on private land, and were just tiny dots in the agricultural landscape around them. Perhaps as recently as fifty years ago, before the advent of specialized agriculture and in a time when farmers kept animal stock, as much of 40 percent of the landscape of northeast Iowa was pasture land that harbored not only native plant communities but also many other grassland animals. Somehow, the small colorful sites we had visited so far had survived industrial agriculture.

In contrast to the small sites we visited, and most remarkable of all, was the 240-acre Ada Hayden Prairie. While the previous sites fit easily into one's view, Hayden Prairie seemingly stretched to the horizon. The diversity of plants was remarkable. In one glimpse I recall seeing seven different species in bloom at one time. Remarkable too was the bird life, especially the bobolinks, with the males fiercely and noisily defending their territory against other males. So distracted were they, we could approach them very closely. We also saw a northern harrier rise off the prairie, only to be harassed by black birds. Hayden Prairie is truly too large to see all of it, and too amazing to understand in one visit. For the true prairie aficionado, Hayden Prairie is a must see.

Our final visit was to the tiny Ludwig Prairie near Spillville. This small county-owned prairie sits on a limestone outcrop near the edge of Iowa's driftless zone. While those of us in southwest Wisconsin think we know limestone prairies well, Ludwig Prairie was truly amazing. Lost in a beat-up landscape, Ludwig Prairie contained all the mesic prairie species we had seen much of that weekend, but it also supported populations of *Psoralea* and *Zigadenus elegans*, and big stands of cream baptisia and lousewort (*Pedicularis canadensis*).

Three months later, it's hard to recall all the details of all the sites we visited. But I'm still amazed that such rich sites have survived, and at just how rich they are. Our Memorial Day trip was in the true spirit of prairie enthusiasts everywhere. The TPE members who attended came together over a common interest, and Mark Leoschke provided a link to our fellow enthusiasts in Iowa. Such cross-pollination allows the flow of ideas and hopes between the many different types of people who have share a love of prairies.

For pictures from the trip, be sure to visit the T.P.E. website at prairie.pressenter.com.



SUMMER MEMORIES-OVR FIELD TRIP PRIZE

By Donna O'Keefe

Some people find their peak experiences in death defying, heart stopping moments. You know the kind--free-falling from an airplane, climbing to a mountain summit or hiking in a rain forest. Others of us revel in less harrowing events--spotting a Karner blue butterfly, gazing at a pasque flower, or watching a painted turtle sunbathe near a prairie pond.

I, a reveler of the second sort, consider my June excursion to the Kickapoo Valley to be peak. The afternoon was so much more than I had anticipated when I stopped in front of the second auction item at TPE's 2001 annual conference and sensed that it was meant for me. I hovered over the plain white envelope to be sure no one outbid me. I hovered so long that I was tossed out of the room at the auction's close.

I'd seen prairie restorations before, but never in one of my favorite Wisconsin valleys and never transversed by a trout stream. I was intrigued, not only by the acreage and location, but also by the creative people who thought of such a donation. "These are no bored-with-life folks," I thought. "Only 'Life Enthusiasts' would offer themselves, their land and their refreshment for an entire half day to unknown (and possibly obnoxious) prairie buffs." E-mail chat with Mary Lee Croatt told me I was on target. She and Lloyd are enthusiasts plus. I couldn't wait for 'my' afternoon to arrive. But what would three prairie lovers do with my introverted, 'what's-a-prairie' husband? I needn't have worried. Mary Lee and Lloyd, hosts extraordinaire, invited him to cast his flies on the river while we tromped about the land, and then fed him chunky homemade stew.

From the Arnie Palmer iced tea hello to the Amish maple syrup good-bye, despite heat, humidity and chiggers, our hours on the Croatts' prairies flew by. I say prairies because the 80 acres contain diverse communities thriving in dry, mesic and wet environments at various elevations and light exposures. Just a few years since restoration began, the natives are announcing their preferred locations and are thriving on once agricultural land that for decades had been cultivated, fertilized and 'poisoned.' Finding forbs established and blooming there, amidst stubborn aliens and clumps of native grasses on rocky outcroppings was as satisfying as finding treasure. Their existence affirms the Croatts' boundless energy, focused labor of love and resounding 'hope for the flowers.'

Thanks, Mary Lee and Lloyd, for a memorable time on your renewed land with your great food and company. I hope we will meet again many times. And if you decide to dedicate yourselves to TPE in the same way next year, guess who will be hovering over the auction table?



Mary Lee and Donna on the prairie

SUMMER MEMORIES-OVR FIELD TRIP AUCTION WINNERS

By Mary Lee Croatt

In spring The Prairie Enthusiasts had a fundraiser at their March 2001 banquet and conference. We pondered what we could give to help the cause. We thought of how we are trying to purge our household of "stuff"; perhaps others are also trying to simplify their lives. We decided to donate our time and experience to the organization. That wouldn't collect dust or take up space.

We packaged our gift as "An Afternoon on the Prairie". We designed an exhibit board with photographs of our prairie and of us working at land restoration. It said: "An afternoon on the Prairie on private land in Vernon County. Included is a tractor/trailer ride with an oral history of our project; a hike up to the bluff to experience a prairie remnant and savanna; wine served on the overlook above the westfork of the Kickapoo River; and dinner prepared by chefs Mary Lee and Lloyd Croatt."

To the back of the board I taped an envelope with our names, address, phone, e-mail address and map to our land to be given to the highest bidder.

Several weeks later I received a letter from Donna O'Keefe introducing herself and her husband as our winners. By e-mail we arrived at a mutually agreeable date, and food and drink preferences.

Saturday, June 30, 2001 came and we had readied ourselves for the experience. It could not have been a hotter, muggier day. Donna and her husband arrived. Donna is the personification of a prairie ENTHUSIAST, bubbling over with excitement, observations and

questions. Gene was the dutiful husband supporting his wife. We had rigged up the adirondack bench on the trailer, so that the O'Keefes would be comfortable. I sat on a straw bale to be the tour director as Lloyd revved up Blue Bugger, our thirty something Ford tractor. We carried a cooler filled with filtered water and an iced tea and lemonade concoction, their drink of choice, to hydrate ourselves as the sweat poured off our brows.

We gave the full spiel as to the history of sections of the valley where we had planted, burned, mowed and weeded over the years. Plant names escaped my mind as I prattled on. Donna's astute questions challenged my knowledge and reminded me that I need to study more and perhaps work less. We stopped at our oxbow pond where a turtle was sunning itself on a log. Donna was sure that it was unable to get off and wanted to rescue it. As we

approached, it slipped back into the pond. Gene laughed. Between activities we went back to the shed to cool off in front of the air conditioner and sip more liquid refreshments. Gene held out during the trailer ride through the prairie plantings in the valley. Then he graciously excused himself to do what he loves best: fish in our well-stocked catch and release trout stream.

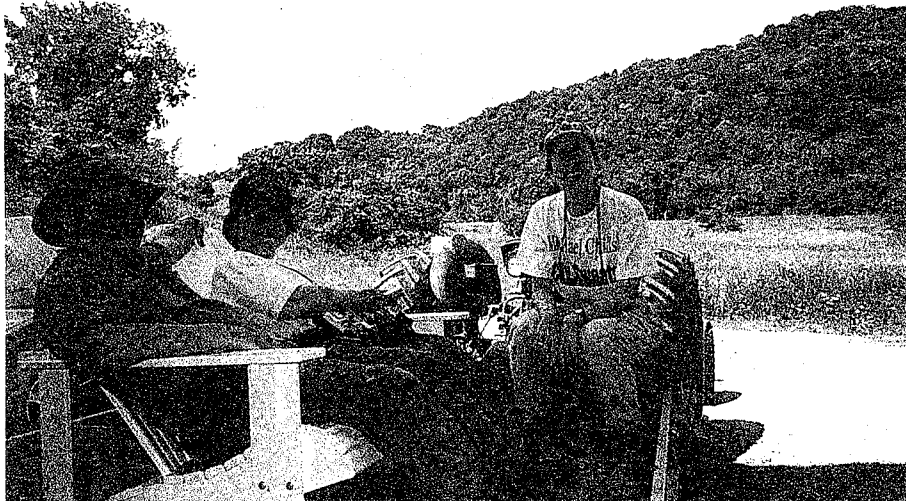
Our prairie hike took us up the bluff with Donna. A profusion of spiderwort, harebells and leadplant dotted the goat prairie where last year's run-away brushpile fire took off. What a heavenly sight! Neither guest drinks alcoholic beverages, so we dispensed with wine tasting on the overlook this very hot day.

Gene is a meat and potatoes guy, so the "chefs" had earlier prepared a crockpot meal so that our time could be spent enjoying our guests. I am embarrassed to admit that it was overcooked by

the time we sat down for it. Dinner conversation expanded beyond prairies to topics of history, genealogy and family life.

While we were sitting at the table, our Amish neighbor stopped in. We were able to convince him to stay for dessert, so our guests had the added pleasure of meeting our good friend Daniel, who lives a totally different lifestyle. We sent the O'Keefes off with a bottle of Daniel's homemade maple syrup to remember the day.

So who were the auction winners in this donation? I know it was us. We had the pleasure of sharing the story of our project. It was an affirmation of what we believe in and what we have accomplished so far. We made new friends who share in our dreams and values. Prairie Enthusiasts got a donation, but we were the winners!



Mary Lee, Donna and Gene on Blue Bugger

RESTORATION PERSPECTIVES

THEY JUST DON'T GET IT!!!

By Vance Baker

In the prairie department, I don't consider myself to be a rocket scientist and in the restoration department, well...I'm no Gary Eldred. Furthermore, I don't mean to

go on a rant here, but really, some people just don't get it.

When first starting my prairie planting 10 years ago, I thought I might have some local farmers help with the site preparation and early mowing, thereby avoiding the expense of buying equipment.....wrong!

If looks could kill, the look on one neighbor's face when I asked him to disk a field full of huge hard clumps of dirt one more time before broadcasting my seed, I'd

be a goner. I forever curse a site prep left with plow furrows and ridges which caused me to shave clean these ridges when mowing the first year and cause a flare up of back pain and other sundry ailments of the posterior region as I jostle up and down during each fall mowing.

Boy, I can tell you that each week it was a ton-o-fun to drive up from Milwaukee to southwest Wisconsin the first year of my planting and observe the dense carpet of weeds reach 2-3-5-7 feet tall. Little of that planting survived and my expletives deleted echoed throughout the valley as I settled into my "relaxing" getaway each weekend.

Then of course there is the ongoing struggle to hire help so I can sit down on occasion and prevent further deterioration of my aging spine I paid a budding juvenile delinquent in advance (real smart) to pick up piles of cuttings on a freshly mowed planting where the foxtail was too tall to leave lie. The piles lay until I picked them up two weeks later. Yellow dead zones littered the field like acne on his little face while he sat in a local jail (for an unrelated crime). God knows I tried to appreciate the hard working guy who was mowing and weedwacking nettle and burdock along a stream area I wanted cleared. He shaved a 70 degree streambank clean as a whistle and the next flood proceeded to carry away 20 feet of streambank, a mature cottonwood and a beautiful adolescent walnut. I would love to know what it is about brushpiles that people find so confusing. I usually have to restack and cut them up in order to get a pile tight enough to burn well. Besides that, could someone tell me why they have to be built under the canopy of the trees I am trying to save? And last but not least, the poor souls who come, usually just once, to pull wild parsnip in shorts and tank tops.

Isn't it fun to talk about your prairie planting projects at parties? NOT! There are those who think me a fool because "wouldn't nature just take its course and re-establish prairies if you just left the old corn fields and pasture alone?" After all, "what did nature do before you were around?" There is the armchair ecologist who thinks I've invented the concept of a weed and in a Zen monotone tells me "all of nature has its place". There is the nature lover who calls me a true killer as I cut slippery elm, box elder, prickly ash and old apple trees as I release oak saplings on a hillside which I hope to turn into oak savanna/open woodland. There are unsympathetic ears who think I'm a prima donna because I complain a planting is full of early successional species and lacks my hoped for biodiversity. Also there is the guy who tells me Canada goldenrod is a native species and who cares if it occupies 70 percent of a planting? Finally there are the locals who gently educate me about the fact that burr oaks are knarly, slow growing, poor timber trees and gently say, "you may want to plant white oak."

Let's not forget the hunters or as I call them, my wolves, who help keep the deer herd under control. I love it when they put salt blocks in the woods and a 12-foot wide ever deepening hole develops as the deer paw at and eat the salt laden earth year after year. Hey, how about the time they BOUGHT sweet clover seed to spread in an old field "because the deer like it", after I just spent three years and who knows how many hours eradicating it from my plantings! I loved it when one hunter drove his ATV over my prized prairie remnant as the pucoons were blooming, proclaiming "I tried not to ride over any plants".

Honorable mention needs to go to the guy who recommended I use Tordon on box elder which was invading a planting. It worked so well that a three-foot kill zone formed around each one-inch stump. We all appreciate the county mowing teams that time their mowings perfectly so that wild parsnip seeds are good and mature but the golden alexanders aren't quite viable.

I was going to close with the contractor who, on his way to my cabin, drove his BULLDOZER through a planting "because it was quicker" and managed to find the blue flag iris patch I started with plant plugs. But before I could get this article off, the phone company called. They won the grand prize for dumb s*** of the year award.¹ Rather than follow the road up to my cabin, or at best follow the fire lanes through my planting (and do so last fall when the plants were dormant), they brought their equipment through the heart of my planting in June to lay my phone cable. They somehow managed to find an eight year old cream gentian patch I use as a seed source. So much for the communication giant's ability to communicate with their customers.

Ya know, like I said, I'm no rocket scientist, and at the age of fifty, I've fried a lot of brain cells. In fact of all the things I've lost...you guessed it...I miss my mind the most. But really, some people just don't get it.

¹Editors note: the runner-up for this award was a Grant County Highway Department crew, who, after failing to mow glade mallow growing on top of a steep embankment, came back and sprayed it!

The "Motivans Farm" and the Rebirth of a Prairie

By Anna Motivans

About 25 years ago my husband, Joseph, and I bought about 14 acres of land near Barre Mills, Wisconsin. It was a neglected piece, overgrown with brush and with trash dumped in the little spring fed stream flowing through it.

The following winters our family spent weekends there, cutting the brush and fallen trees, collecting trash, barbed wire, an old refrigerator and parts of a car from the creek. In the spring we pulled poison ivy plants and burned them with the brush and old grass. My husband plowed the two fields in front and seeded them with

grass. We planted birch trees along the drive to a spot where we planned to build a pole barn later. Many loads of gravel were brought in and the driveway was put in. We planted Norwegian spruces along Drectrah Road and across the creek. On the side of the creek where the scrub brush had been cleared, we planted black walnut, crabapple, high-bush cranberry, dogwood, mountain ash a bunch of white and red pine and willow trees. At that time we did not know much about "good trees" (for this area) we SHOULD have planted. All we wanted to achieve was a pleasant, restful place for our family, birds and other wildlife.

By the mid 1980's our piece of land was blooming in clover, apple and crabapple trees. The first lilac bushes started to bloom. We had a huge vegetable garden to feed our large family. Both of our parents enjoyed spending time there. They, too, kept on planting new things and cutting the brush.

In 1990, our son Mark's wedding was held at the "FARM" -- complete with a white tent, tables, chairs and china table settings. Even a dance floor had been specially built and the music rocked the valley. This was Mark's special place. During his high school years he and his friends had a rock group and used the barn for "jam" sessions to practice their music. To this day on some summer weekends the group still gathers with their children and spouses to enjoy reunions and to share their album of memories with me. Our children grew up, married, moved away. Yet, every fall they gathered there to play volleyball and had picnics until my husband's death in spring of 1994.

That spring I gathered the first apple blossom branches from the trees that my husband had planted, brought them home, and placed them in a vase - just to look at them, inhale the fragrance and think. What should I do with this place that was so dear to our hearts? It is getting difficult for our children to gather there as they all are working and living far away. Yet, this is a special place for our family. I know -- there must be hundreds of better and more beautiful places -- but this one belongs to us and had been a happy one.

Spring, 1996. A two-acre sliver of our land along Drectrah Road is classified as "highly erodible" land. It is a gentle slope facing West and a deep ravine. At first we had our friends use that area for vegetable gardens. Later on our neighbor planted corn for several years. I remember reading books on the old prairies of the Midwest. Our daughter, Karene, had graduated from UW-L with a degree in Biology and by now had just finished her master's thesis in Landscape Architecture from UW-Madison. One of the maps in her thesis showed the "Early Vegetation of Wisconsin". The oak savanna had flourished right here around La Crosse! Now I knew what I was going to do with the two acres!

Fall, 1996. On October 20, the field was disked and dragged. On the following Sunday Chris and Amy Matson and I hand seeded the two acres with assortment of prairie grasses and 85 prairie flowers (forbs) that are native to La Crosse County. Chris also had planted several Bur Oak seedlings here and there. "If these seeds germinate -- there will be a prairie blooming on Drectrah Road", I said to myself. In my notes from that time I wrote: "My muscles are still stiff from last Sunday's seeding -- I'm just an old woman who has these crazy ideas!" Well, maybe I'm young at heart. I still think that idea was beautiful! The next day it rained and a week later it snowed. Our seeded prairie should be doing well -- the seed was securely meshed to the soil waiting the next spring. In three years we will see if there is a gentle slope on Drectrah Road (swaying in the summer breeze) with prairie grasses and the blue gentian and queen of the prairie shining in it! I dearly hope that I can live to see it! I would like to leave this little space of land more beautiful than we found it.



Spring, summer, and fall 1997. The summer came and so did the burdock, ragweed, thistle, some Queen Anne's Lace, and the oats. Later on we could see the weedy foxtail between the Canadian rye stalks all over the place. Frankly, the prairie site looked pretty bleak. In late June Chris Matson spot removed the weeds and left the oats in the field. He also cut out some of the "trash trees" from the gully - in order to stimulate grass growing and retaining the soil on the banks. I tried to pull out the ragweed. Then I discovered that by pulling ragweed I also might be pulling out the very new sprouts of the prairie grasses and flowers we had sown there. So, I clipped the ragweed and piled it next to the road. Would you believe it? It kept on blooming and growing right there in the pile!

Spring, summer and fall, 2000. The summer of 2000 was a good one for the prairie! While early spring is the time for pasque flowers, prairie smoke, blue eyed

grass and others, the month of June is GREEN on the prairie. The most profuse blooming season starts in July or even towards the end of July. This year it was most spectacular for the yellows, blues and purples! The very tall cup plant bloomed profusely with yellow blossoms. It is such an interesting prairie plant -the leaves are arranged so that they hold water. For the birds, butterflies, and other insects it serves as a water fountain. With its sturdy stalks it is visible above the tall grass and other plants.

There was an abundance of the yellow and purple cone flowers, coreopsis, evening primrose, blazing star, lead plant, bee balm, milkweed and many more that I have to learn to identify and name. I saw the beautiful swallowtail, the monarch, and even the rare, small blue butterflies. Later in the season I could see many goldfinches feasting on some of the early seeds. I had my prairie.

Restoring What Was Lost- One Couple's Journey

By Mary Thompson (reprinted by permission from *The Milton Courier*, August 9, 2001)

North of Milton, on Vogel Road, there is a crushed rock driveway that winds west off the road, through marshland, woods and prairie until it ends at a clearing next to a small barn. The air is mellow with the scent of horses and the air buzzes with the sounds of insects. The sounds of man are almost non-existent. The 380-acre property belongs to Penny and Gary Shackelford, of St. Louis, Mo., and it is a very special place.

Ecologist Rob Baller works for Rock County and is intimately familiar with the Shackelford property. He has been working with the Shackelfords sporadically for about two years, advising them on how to return the land to pre-settlement conditions - an ambitious task on the smallest of properties, a life work on this property. "It's just been a friendship relationship," said Baller. "Originally we had talked about me being a consulting ecologist, but I just didn't have time. They were doing everything right, anyway, so we talk on the phone from time to time and e-mail now and then."

Penny Shackelford has ties to the area. Originally from Fort Atkinson, she and her husband Gary are both professors of medicine at Washington University School of Medicine. Penny is an infectious diseases specialist in the Department of Pediatrics and Gary is a pediatric radiology specialist in the Department of Radiology.

The Shackelfords bought Fair Meadows about 10 years ago. When asked why they bought the property and began their project Penny said, "We are interested in natural history, both as a biological science and for the pleasure of discovering, watching, nurturing and learning about the natural world. This started with

'birding', branched into wildflowers and now includes everything we have the time to learn about and enjoy" Recently, as a favor to the Shackelfords, Baller led a small group of individuals through Fair Meadows. The group was organized by the Rock County Conservationists to give average folk the opportunity to see ecological restoration as a work in progress.

(It must be emphasized that the Shackelford property is private and should not be entered except with the owner's express permission). In conversation after the tour, Baller explained that as regards ecology, much of what the average person looks upon they don't truly "see." Ecology gone awry can be deceptively beautiful. Man's intervention is unquestionably the most toxic of influences," he explained. "There is vastly more damage to the environment than most Americans can imagine... as a person begins to learn ecology they see this for the first time, and it is usually more than most people can tolerate emotionally," Baller said. "Once a person gets to that stage and passes through 'the great depression' a person also gets to realize that the soils have been building for thousands of years and the plants and animals have been living for thousands of years and humanity is nowhere near powerful enough to erase that, yet. "Ecology will continue. People tend to throw up their hands and act as though an atom bomb has landed. It's not quite that bad. As long as there are people like the Shackelfords, -there is hope." The ecological renovation of Fair Meadows has been a learning experience for the Shackelfords.



"We wanted to enjoy the tremendous diversity of life that was present before large scale human disturbance," Penny explained. "Including the introduction of 'exotic' species of plants and animals. An important part of the diversity of native species is understanding their interaction and interdependence. At first we thought it would be easy -- just 'let it go back to nature.' Well, we were really naive. The problem of 'alien' species really is a serious one and has taken most of our efforts. Our greatest pleasure is to remove species such as buckthorn and see the response of the native plants that have been suppressed. The harder

work is to start from scratch in fields that have been used to grow corn or were planted to apple orchards."

Baller said recently that much of the invasion of 'exotic' or 'alien' species of plants (and animals) can be directly linked to practices and philosophies brought to America by Europeans. "The European philosophy and practice of reshaping the environment and then restocking the environment with non-native plants and animals has contributed greatly to the advance of 'alien' species in the wild".

To return their property to pre-settlement conditions the Shackelfords needed help. They called on the services of Midwest Prairies of Fort Atkinson. Assistant Maintenance Manager, Chris Kaplan, said the company's involvement with the Shackelford's property is ongoing.

"The Shackelford's mission statement is to restore that property to presettlement conditions, so anything inconsistent with that will either be restored or removed" Kaplan said. "So, things like the orchard and plantations of pines, things that the settlers altered, those are things that we are in the process of turning back to native." A large part of Midwest Prairie's work at Fair Meadows has been the removal of invasive species, "many of which were originally brought to America as ornamental plants, or which in some cases were brought by accident in shipments of grain or other biological products," Kaplan said. These species include such easily recognizable plants as reed canary grass, wild parsnip and buckthorn.

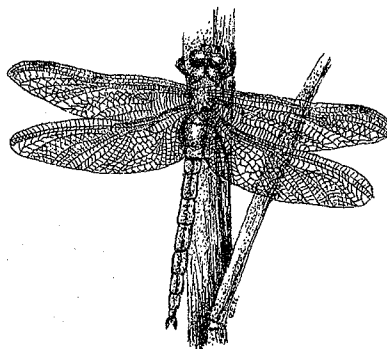
"Every time something is thrown in, it throws something else out of balance," he said. "Basically the plants and animals here are naive to introduced plants and animals so the animals here don't have the need or the desire to feed on them. Natural predators like animals that would feed on them, or perhaps a fungus that would kill them, aren't here, so they can flourish because there is no natural control. "

"We analyze what the site would have been like prior to disturbance... basically, in this part of the state, we are looking at tallgrass prairie and oak savanna." A significant part of Midwest Prairie's involvement at Fair Meadows has been the restoration of prairie that had been converted to an orchard some time in the past. "In one day we could have brought in a bulldozer and pushed the trees all to one side and burned them," Kaplan said. "But the damage it would have done to topsoil would have been significant. So we opted to cut those trees back (to about three feet) and we seeded it back to prairie between them."

With the aid of matching federal grants the Shackelford's have introduced two ponds to the property that Kaplan calls "wildlife scrapes." Both were created by Rock River Drainage.

"Basically you would establish a wildlife scrape where you have an existing low area. You create a little bit deeper depression so it holds water, mainly in the

spring. This creates nesting habitat and food for waterfowl. Shallow water warms up quickest in the spring and the underwater organisms that water fowl feed on will be alive and swimming around. When the ducks come up from the south they'll have something to feed on". Near the ponds are plants like sweet flag and bulrush. One of the ponds is home to several endangered Blandings turtles. Today Fair Meadows could be said to be moving back in time. Environmentally it is closer today to what it was a century ago than to what it was just a few years ago.



An oak savanna, which includes one massive burr oak tree with limbs that rest on the ground, is taking hold nicely. Several large prairies have been almost completely purged of invaders and are filled with species like common golden Alexander, yellow coneflower, white indigo, daisy fleabane, spiderwort, wild bergamot, rattlesnake master, false indigo, Canada tick trefoil, prairie cord grass, foxglove and dozens of others varieties. In one small segment of one of the prairies there is a small pocket of the delicately beautiful prairie fringed orchid. Swallows swoop over the prairies, plucking insects out of the air. Birdsong fills the air. On one border the Shackelford property meets a large wetland. Baller stood and looked out over the water and sighed. "You want to just bow down to it," he said "I mean, that's ecology."

The Shackelfords will soon retire from teaching medicine. "We plan to devote full time to the project next year when we retire from medicine," says Penny Shackelford. "It is a great pleasure for us to learn from all the experts at the university, the Arboretum and the DNR, and to use the project as an education resource for others."



MUCH YET TO LEARN

By Rich Henderson

About 8 years ago, I started to notice insect damage on the rosinweeds in the prairie plantings around my house. The feeding damage was distinctive, but the animals themselves were not evident. They seemed to feed exclusively on the newly emerging leaves at the top of the stem. They would start in mid May, and be mostly done by early July, leaving in their wake a section of stem with chewed up or absent leaves. At first, I did not pay much attention to the feeding, but the damage kept getting worse each year until 4 years ago when nearly all rosinweed plants were affected, some to the point of being suppressed and having no flower production. This finally got my attention.

Upon closer inspection, I discovered that small moth larvae were doing the feeding. At the time, I was coordinating a survey of insects on prairie remnants as part of my job with DNR Research. The purpose of the project, in part, was to discover what prairie-restricted insects might still be lingering on our prairie remnants. Thus it dawned on me, belatedly of course, that maybe I should try to get a name put on my rosinweed pest. After all, I now had the contacts to get it identified, and it is feeding on a *Silphium*, which is a genus known for its sticky sap and other traits bothersome to most insects. Such traits, although they make a plant less desirable to generalist insects, increase the chances of a plant developing a following of specialist insects. So maybe, just maybe, my pest was some well-known prairie-specialist.

This was my hope, but I knew the odds were not good, for my site was a restoration that had no rosinweed (or any *Silphium*) present on it 20 years earlier, and the nearest natural populations of *Silphium* were over a mile away and very small. But I gave it a try anyway. I collected some late stage larvae, and managed to rear out two adults. This step is critical, for to identify moths to species, adult specimens are generally required. I gave the specimens to Les Ferge, our local moth specialist here in Madison. He prepared them and sent them off to Eric Metzler in Ohio. This was necessary because the specimens turned out to be micro-leps, a large group of several families of moths known for their small size and difficulty in identification, and Eric had experience with them. However, the little guys were beyond Eric's experience so he turned to an expert in Texas.

Finally, this past winter, two and a half years after I reared the moths, Eric sent me an e-mail that simply stated "The moth you reared is a Choreutidae. John Heppner examined the moth and said it is one of the least commonly collected - only a dozen or so specimens known. The name is *Tebenna silphiella* (Grote, 1881). John was very excited to see it. The life history is undescribed. According to John, you are the first person, since it's description in 1881, to see larvae of this animal." I was stunned, and I accused Eric of pulling my leg, but he assured me that he wasn't.

Eric, Les and I are now collaborating on a paper on the ecology of the "rosinweed" moth. We have found it to be widespread on rosinweed in southern Wisconsin, and a fast and strong flier that looks and behaves more like a fly than a moth. People have been simply overlooking it for a hundred years.

I long have had a strong curiosity about what insects might still be found in our little prairie remnants, but this experience makes me wonder even more what may be lurking out there among the prairie plants. Prairie, on even the smallest of patches, including backyard restorations, should not be ignored.

WHERE DID THE ELK AND THE BUFFALO ROAM?

By Rich Henderson

Pollen records preserved at the bottom of small lakes and wetlands reveal that the landscape of southern Wisconsin became dominated by prairie and oak savanna approximately 6,000 years ago. This was the result of a combination of climate change and frequent fires set by lightning and humans. When the first European missionaries, explorers and fur traders entered into what is now the state of Wisconsin in the 1600s they reported seeing buffalo (bison) and elk, sometimes in herds of up to several hundred, on the region's prairies and savannas. Bison seemed to be limited to the most open prairies, whereas elk were equally common in prairies, savannas and open woodlands. There is no doubt that during the 1600s many elk, and likely at least some bison, were using the prairies and savannas of southern Wisconsin.

However, the bison herds were likely meager compared to the massive herds out on the short and mixed grass prairies of the western plains. Hunting by local tribes were likely keeping their numbers in check.

When it comes to understanding the ecology of Wisconsin's prairie and savannas, the real question is not whether bison and elk were here when the first Europeans entered the region, but how long had the bison and elk been roaming the region? Were bison and elk in the picture in the preceding 6,000 years when the prairies and savannas of southern Wisconsin were developing during post-glacial times? Surprisingly, the answer seems to be, for the most part, no.

The archaeological evidence suggests that modern bison were almost non-existent east of the Mississippi River prior to 1550, and that elk, although present and widespread in the east prior to 1550, were in low numbers. Why then were bison and elk so common in the 1600s? The answer seems to be disease. Not disease suppressing the animal herds prior to 1500, but disease suppressing human (i.e. indigenous people)

numbers after 1500. We all know what happened in the famous (or infamous, depending upon your perspective) year of 1492. The newly arrived "guests" from the Old World unwittingly brought with them many new diseases which the Native Americans lacked resistance against. It appears that pandemics swept through the New World, repeatedly devastating the indigenous populations. Often these die-offs happened in advance of the first Europeans coming into an area. Thus, a common misconception developed that most of the New World had always been a sparsely populated wilderness full of game when in truth, many areas of North America had been in fact heavily populated, and game, at least large game, was limited. This included much of what is now the eastern U.S.

Archaeological and paleontological evidence suggests that human hunting pressure kept bison mostly confined, for the past 8,000 years or more, to the western shortgrass and mixed grass prairies of what is now Montana, the Dakotas, and south to Texas. During this same time, elk, unlike bison, were present in the east, but humans kept them at very low numbers. Deer were the most common large mammals, but even they were not nearly as abundant as they are today. At archeological sites in Wisconsin, Iowa, and Illinois, dating from 4,000 years BCE to 1500 CE, deer bones are 10 to 300 times more common than elk bones. Limited numbers of bison regularly ventured into, and persisted over long periods, in central Minnesota and central Iowa but they rarely made it as far east as eastern Iowa and southwestern Wisconsin. Large mammal ecologist V. Geist states that "given the hunger and hardships revealed at archaeological sites, bison would have been exterminated had they not removed themselves from the reach of human hunters." Starting about 7,000 years BCE "human hunters confined bison to the Great Plains, keeping them away from the richer forage of the western foothills and the eastern river systems." After human numbers declined in the 1500s, bison began to increase in numbers and move east. By 1650 they had moved well into southern and western Wisconsin, Illinois, Indiana and Ohio and by 1700 had made it all the way to the Atlantic coast and northern Florida.

Bison most likely reached their peak of abundance in Wisconsin in the early 1600s. When Nicolet arrived in Green Bay in 1634 he encountered the Ho-Chunk who had in place a tradition of hunting bison, complete with a buffalo clan. As late as 1666, the Ho-Chunk were still traveling to the prairies south of Lake Winnebago to hunt bison. But by 1700, the bison were gone from southeast Wisconsin and from the prairies south of the Wisconsin River in southwest Wisconsin. The tribes of the area had to travel well into Illinois and Iowa to find bison for hunting. It appears, at least for Wisconsin and Illinois, that rebounding populations of Native Americans eventually repelled the bison invasion long before

appreciable numbers of Europeans arrived. During Marquette and Joliet's famous trip in 1673 from Green Bay up the Fox River and down the Wisconsin River to Prairie du Chien they reported seeing elk, but no bison until they reached the Mississippi River. From their account in 1673 up until 1767 bison herds of up to 400 animals periodically were reported crossing the Mississippi into Wisconsin near Prairie du Chien.

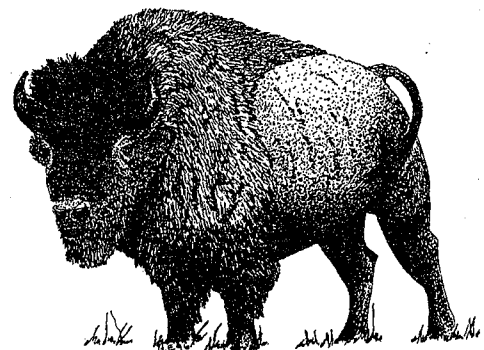
Bison were able to maintain themselves for the longest period in Wisconsin in the Chippewa and Black River areas of northwest Wisconsin. From the 1660s to the 1770s bison and elk were reported as common in that region. As recently as 1817 bison and elk were still being "hunted by Indians at all seasons" in the Chippewa River area. This remarkable region was described by many early accounts as the "greatest game region in the state." The cause of this abundance was a long-standing territorial dispute between the Chippewa and the Lakota. The Chippewa and Black rivers area was a war zone, a "no-mans land", in which it was dangerous to hunt. Thus hunting pressure was low and game thrived. However, that all changed in 1820 when a peace agreement was reached between the tribes. After that, bison and eventually elk disappeared from the region. 1820 was the last year bison were reported to cross the river from Minnesota into the Chippewa River valley. The last bison in the area was killed in 1832. This was also the last bison reported in the state. Elk lasted longer than bison in the former war zone, but by 1866 they had been killed off as well.

The prairies and savannas of southern Wisconsin hosted occasional elk during their 6,000 years of existence, with a significant but temporary increase in numbers in the 1600s and 1700s. Bison, on the other hand, likely never played much, if any, role in the development of Wisconsin's prairies and savannas. Even during the peak of bison expansion into the state in the 1600s, their numbers appear to have been rather limited overall, and prior to 1600, they appear to have been very rare visitors indeed.

Suggested reading:

Geist, V. 1996. Buffalo Nation: History and Legend of the North American Bison. Voyageur Press, Stillwater, MN.

Schorger, A.W. 1937. The Range of Bison in Wisconsin. Transactions of the Wisconsin Academy of Science, Arts, and Letters 30:117-30.



CALENDAR OF EVENTS

COULEE REGION CHAPTER

MEETINGS

Wed.,	Oct. 17	Chapter board meeting at 6:30pm, at the La Crosse main library, 800 Main St.
Sat.,	Nov. 3	Chapter board meeting at 10am, at the La Crosse library, 800 Main St. Main speaker will be Ben Logan, local author, who will share his vision and tribute to the earth that nourishes us all.

EVENTS

Sat.,	Oct. 20	Work party at Sugar Creek Bible Camp at 10am. Exit Hwy C at Ferryville and go 5 miles east.
		For other Coulee Region Chapter work parties, check www.homestead.com/couleeprairie .

NORTHWEST ILLINOIS CHAPTER

FALL SEED PICKING SCHEDULE

Sat.,	Sep. 15	12:30pm at Lone Tree Farm.
Sun.,	Sep. 16	1:30pm at Blackjack Prairie.
Sat.,	Sep. 22	12:30pm at Elmoville Prairie.
Sat.,	Sep. 29	12:30pm at Harmet's Prairie.
Sun.,	Se. 30	1:30pm at Lone Tree Farm.
Sat.,	Oct. 6	12:30pm at Twin Bridges.
Sun.,	Oct. 7	1:30pm at Lone Tree Farm.
Sat.,	Oct. 13	12:30pm at Blackjack Prairie.
Sun.,	Oct. 14	1:30pm at Lone Tree Farm.
Sat.,	Oct. 20	8:30am, Annual Seed Thrashing Party with chili lunch.

SOUTHWEST CHAPTER

MEETINGS

Sun.,	Oct. 21	Chapter meeting at 1pm at the home of Gary Eldred, 4192, Sleepy Hollow Rd., Boscobel, WI 53805. Call for directions, 608-375-5271.
Sun.,	Nov. 18	Chapter meeting at 1pm at the home of Sue Linder, 206 Adams Street, Boscobel, WI 53805. Call for directions, 608-375-2668.
Sun.,	Dec. 23	Chapter meeting at 1pm at the home of Gary Eldred, 4192, Sleepy Hollow Rd., Boscobel, WI 53805. Call for directions, 608-375-5271.

EVENTS

Sat.,	Oct. 6	Work party at Bush Clover Prairie starting at 10am. Cutting small brush, seed collecting and sightseeing.
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Sun.,	Oct. 14	Work party at Heather's Prairie starting at 10am. Cutting small brush, seed collection and sight seeing.
Sun.,	Oct. 28	Work party at Vale Prairie starting at 10am. Seed collection, brush cutting and fall burn if weather permits.
Sat.,	Nov. 3	Work party at Bush Clover Prairie starting at 10am. Seed collection, brush cutting and fall burn if weather permits.
Sun.,	Nov. 11	Work party at Heather's Prairie starting at 10am. Cutting small brush and seed collecting.
Sat.,	Nov. 24	Work party at Vale Prairie starting at 10am.
Directions for work party locations, call Gary Eldred at 608-375-5271.		

GENERAL CALENDAR

Sat.,	Nov. 3	11 th Annual Prairie Invertebrate Conference at Luther College, Decorah Iowa. See announcements on page three for details.
Thu.,	Nov. 15	TPE Board Meeting by tele-conference. Phone Kathy Kirk at 608-527-2686 for details.

COULEE REGION CHAPTER

Successful Chapter Annual Picnic

Aldo Leopold observed that "a thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise". With this in mind our chapter members continued to work hard on their own restoration projects. We met for a successful and fun chapter picnic, hosted by Cece Caron and Tom Erb. We walked their restoration and visited the nearby site of Armund and Jody Bartz as well. Armund shared in detail his restoration and continued maintenance. It is healthy. It is beautiful. It encouraged us all.

Spreading the Word

Educating and spreading the good news for prairie was also our privilege this summer. We participated at the National Walnut Council Meeting in La Crosse. Their members were a captive audience and many are anxious to try a restoration project on appropriate areas of their properties. We will also participated at the environmental education field days for sixth and eighth

grades in Viroqua and five surrounding schools. With great enthusiasm our chapter is making inroads at more teaching events.

EMPIRE SAUK CHAPTER

Seed Collecting

Volunteers are needed to collect seed on the sites we manage. The seed will be used in restoring the old fields and areas cleared of brush associated with the sites. We will be collecting seed from the prairie and then hand broadcasting it onto adjacent degraded areas. A flier with details will be arriving in the mail.

The Prairies Need You

Volunteers are needed this fall and winter to clear trees and brush from the prairie remnants we, The Prairie Enthusiasts, manage. The activities will range from cutting and treating individual sumac stems and isolated trees, to clearing and stump treating dense stands of brush and trees, to burning old brush piles, to the ever popular cutting and burning of red cedar. A flier with details will be arriving in the mail. This is rewarding outdoor exercise. Become a regular. The prairie will thank you.

Donation of Mower

Thank you to Don D'Alessio and Julie Hayward for donating to the Empire-Sauk Chapter a walk-behind sickle-bar weed and brush mower. It will be put to good use cutting wild parsnip, sweetclover, new prairie plantings and small brush on our various prairie and savanna projects. Now, are there any volunteers out there willing to assist with the walking-behind part?

Savanna Restoration Appreciation – Do you like what you see?

Recent work to restore oak savanna and oak woodland on Dane County park and environmental corridor (E-way) lands has encountered some opposition from the public. What is being called into question is the removal of brush and trees that are invading and degrading mature stands of white and bur oaks. This work, much of it done by volunteers, is the first step to restoring original savannas and oak woodlands, but it also improves the health of the oaks, which in turn makes them more resistant to the damage that the eventual invasion of gypsy moths will bring. Unfortunately, not all members of the public appreciate the removal work, and they are making their views known. If you are familiar with any of the restoration work, like what you see and want it to continue, please write a letter of support to Wayne Pauly, Dane County Parks, 4318 Robertson Road, Madison, WI 53714. If only negative comments about the work are coming in, it may very well come to a halt. Some examples of the

oak restoration can be seen along the new Capitol City Bike Trail, the Goose Lake E-way near Verona and Fredrick's Hill in Middleton.

SOUTHWEST CHAPTER

Mead's Milkweed Update

Mead's Milkweed is looking great. On May 12, Rich Henderson and I spent the day planting Mead's Milkweed (a federally endangered species) on three carefully selected prairie sites. On Aug. 5, Marlin Bowles of the Morton Arboretum traveled to southwest Wisconsin to visit the sites and evaluate the success or failure of each planting. We started at a T.N.C. site near Barneveld and worked our way west. It was a clear sunny day, but quite hot. In spite of the heat, our enthusiasm grew with each site inspected. As the day passed, it was clear that some of the 50+ seedlings had done better than others, but at least 75% were alive and well. It will be a long time yet before any conclusions can be drawn as to whether Mead's Milkweed will again reclaim Wisconsin as its home and begin reproducing in the wild, but the first steps are positive.

Directors Needed

The Southwest Chapter and its directors have been very successful in our 12 years of prairie conservation. We have purchased and are restoring five prairie or savanna remnants and will be purchasing a sixth in the near future. We have raised thousands of dollars for projects and have provided numerous informational and educational programs. We have consulted with and given technical advice on restoration and plantings to hundreds of members and non-members alike. We have donated thousands of dollars worth of seed to worthy projects and have received several awards for our wildlife habitat conservation efforts. These include awards from the Iowa County Natural Resources Conservation Service and the Aldo Leopold Chapter of the Society for Conservation Biology. This is only a partial list of activities in which our chapter has been engaged, but now we need your help. As with all nonprofit groups, our directors get stretched very thin, and often times have to move on.

As a result, we need people who are willing to serve on our board of directors, to help us do the mundane yet vital work of running the business end of things. Without a chapter and directors to provide a structural foundation, we cannot save prairies and savannas. Please consider helping us reach our goals by giving us two to three hours a month. Call Gary at 608-375-5271.

THE PRAIRIE ENTHUSIASTS MEMBERSHIP FORM

Name _____ County _____ Home Phone: _____ Work
 Phone: _____ e-mail: _____
 Address _____ Business Title/Address: _____

City _____ State _____ Zip _____

SELECT CHAPTER OR GENERAL MEMBERSHIP:

☐ Coulee Region Chapter

Buffalo, , Houston , Jackson, LaCrosse,
 Monroe, Trempealeau, Vernon, &
 Winona Counties

☐ Empire Sauk Chapter

Columbia, Dane & Sauk Counties.

☐ Northwest Illinois Chapter

Carroll, JoDaviss & Stephenson
 Counties

☐ Prairie Bluff Chapter

Green, Lafayette & Rock Counties

Can we provide your name and address to

Other environmental organizations Y / N

Other Prairie Enthusiasts in your area

Y / N

MEMBERSHIP LEVEL

☐ \$250 ANNUAL CORPORATE MEMBERSHIP

☐ \$10 STUDENT

☐ \$20 INDIVIDUAL

☐ \$30 CONTRIBUTOR

☐ \$75 SUSTAINING

☐ Donation

\$ _____

☐ \$30 FAMILY

☐ \$500 IND.LIFE

☐ Southeast WI Chapter (pending)

Dodge, Fond du Lac, Jefferson, Kenosha,
 Milwaukee, Ozaukee, Racine, Sheboygan,
 Walworth, Washington, & Waukesha
 Counties.

☐ Southwest WI Chapter

Crawford, Grant, Iowa & Richland Co.

☐ West Central WI Chapter

Barron, Chippewa, Dunn , Eau Claire,
 Pepin, Pierce Polk & St Croix Counties

☐ General Membership

outside chapter areas

MAKE CHECKS PAYABLE TO:

The Prairie Enthusiasts

PO Box 112

Boscobel, WI 53805

I Will Help With:

☐ Site Inventories

☐ Organizing/Leading Field Trips

☐ Developing Educational Materials

☐ Seed Collecting/Planting

☐ Planning Social Activities (banquet, picnics)

☐ Fund Raising/Grant Writing

☐ Stewardship (Burning, Brush Cutting)

☐ Communications (newsletter, articles)

☐ \$200 BLAZING

STAR MEMBER

THANK YOU

12/3/1999

HISTORICAL EXCERPTS FROM THE HISTORY OF GRANT COUNTY

Researched by Larry Koshkee whose ancestors
 were among the earliest settlers in northwest Grant
 County. Larry is currently a resident of Monroe, WI.

In 1829 Caleb Atwater wrote about a trip from Prairie du Chien
 to Dodgeville, Wisconsin that cited no settlement between them.

"Towards night, in company with Mr. Henry Gratiot, in a dandy wagon,
 in which were placed our mats, blankets, cooking vessels, provisions
 and arms, I bid adieu to Prairie du Chien. Making our way over a
 surface, in some parts very rough and uneven, we struck the
 Wisconsin, about three miles I should suppose, above its mouth; and
 having crossed the river in a ferry boat, we encamped just before
 sunset, on the south bank of the stream, near the water's edge.

The Wisconsin, where we crossed it, was very shallow; full of
 sandbars and small islands, and at that low stage of the water, not more
 than forty rods in width. Its average depth was not more than three feet,
 perhaps even less. The numerous little islands and sand bars, in height
 only a foot or two above the surface of the water, far as I could see the
 stream, above and below where we crossed it, presented to view wild
 rice in bloom.

After kindling our fire, cooking our breakfast and eating it, we
 started in the morning just after sunrise, and making our way as well as
 we could, sometimes through thick set and tall grass, sometimes through
 as impervious a growth of bushes, as I ever saw. By the aid of our
 knives, having no axe with us, we traveled up the river, diverging
 gradually from it, towards the southern point of the compass, until about
 mid day, and with greatest difficulty, we succeeded in ascending the high

hills, and lofty precipices which bounded the Wisconsin basin, on its
 south side. We supposed, that we had traveled 12 miles that forenoon,
 and that we were four or five miles south from the river, when we entered
 the high plain where we stood. I should think we had ascended 1200
 feet from the place where we tarried during the night. In traveling this
 distance, where it was prairie, one of us went before, and led the horse,
 while the other followed the wagon, to lend a hand, when we met with
 any obstacle in our way, as we often did. Where we had to pass a
 thicket, and we had many of them in our way, we were compelled to cut
 a road with our knives, and bend down, and one of us keep down, the
 largest bushes, while the other led the horse and wagon over them.

At last however, as I said, with difficulty, we ascended the high hills,
 and escaped from the prairies and the thickets, and clambered up among
 the piles of rocks, skirting the southern side of the Wisconsin and stood six
 feet within in the open wide spread prairie, whose surface was more than
 one thousand feet above the bed of the river, and nearly two thousand feet
 above the ocean. Not an animated being beside ourselves was to be seen,
 nor a sound heard. An awful silence reigned, as to us, throughout creation.
 Before us lay, spread out in all directions, except towards the deep and
 gloomy basin of the Wisconsin behind us, a boundless prairie, or bounded
 only by the horizon. Above us was a flaming sun at noon day, and the pale
 blue heavens; the sky looked as pure as the Spirit who made it, and not
 even one breath of air was in motion, not a spear of grass, nor a dry leaf
 rustled in the plain or among the trees, nor did even one grasshopper, by his
 heart cheering song, break the awful silence which reigned over this vast
 plain. We stood in breathless silence several minutes, looking on this diluvial
 plain, absorbed in deep contemplation, until instinctively turning right about
 and facing the Wisconsin basin north of us, we could distinctly see that
 wizard stream glistening like the brightest silver, here and there, where the
 absence of the trees permitted us to behold it, in width to the eye, only a few
 inches. (Continued on back page)

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Ruggedness, was a striking feature of this aspect from the vast piles of rocks which had fallen down from their original position into the basin, in every age since the sun shone, or had stood unmoved, during unknown ages, defying all the fury of the elements, and all the ravages of time. Some of them threatened to tumble down on the very first man, who dared to approach their bases, while others, in appearance, seemed resolved to remain unmoved, where they were forever. The contrast between the views, which the plain and basin presented to us, was perfect; the former was as peaceful as the latter was warlike, and both of them appealed in a powerful manner to the feelings of the inward man. A flood of absorbing sensations rushed into the soul. Adoration of the great Author of Nature, deeply impressed on the heart, spontaneously ascended to heaven.

Having recovered ourselves from the reverie of deep and impressive contemplation, which such contrasted views, naturally produced, we once more and for the first time to day, ascended our little wagon, out of which had been thrown out and lost, several articles of prime necessity, in our toilsome march. Directing our course, over the prairie in an eastern direction, along a dividing ridge between the waters falling into the Mississippi, and those descending into the Wisconsin, we moved forward at a brisk rate, until we came into the trace which Dr. Wolcott and his Potawatomes had made, on their journey home, after the treaties concluded. The horse traveled along in the trace or trail, as it is called in this country, and the wheels of our wagon easily moved forward in the grass, which grew only a few inches in height, on this high and dry ground. After traveling an hour or two, we turned off to the right, to look for water, and soon found a beautiful rivulet and several pure springs. They were in a ravine, where we easily found them; by that never failing sign of water, trees and bushes. Here we tarried an hour or more, fed and rested our horse and ourselves, until we moved forward again, at the rate of four or five miles an hour; and so continued to press forward until thick darkness covered the heavens. We had not until then been able to find a place to encamp upon, under trees and near water.

The country we had passed over, after we reached the prairie, south of the Wisconsin, is easily described, its physical features being few. Being at that time new, to me, their impression on my memory was the deeper at the time, and they remain vivid on it now. Traveling up the Wisconsin, and near enough to it, so as just to avoid the deep ravines, made by every little stream that runs into it, from the south towards the north; and we avoided also the ravines along the streams descending into the Mississippi, in a southern direction. When we wanted water, we had only to turn to the right or left hand, until we came to a ravine, or a point of woods, which at unequal distances from each other, stand out into the prairie. These points of woods, and these ravines were our guide boards; and told more truth than some of their namesakes do on our roads. Keeping clear of these, or turning up to them, as we wished either to move forward or stop, we found our way along, as well almost, as if on a good road. Besides, we generally followed a trail where the Indians had recently passed along this route.

The surface of the Prairie consisted of hill and dale, short grass covering the hills and tall grasses and flowers, the vales. The Wisconsin all the way, hid itself from our view, in its gloomy and secluded basin on our left, and the Prairie always showed us its vastness on our right hand. At a great distance, in the Prairie, we saw several mounds, some nearer, others further off, rearing their tall summits, in appearance, to the sky, near the horizon. Occasionally, we saw the dense smoke of some lead furnace, near these mounds, slowly ascending upwards, of a leaden color, or moving as slowly, horizontally, at a low elevation, along in the air. The Wisconsin snow-birds, in great numbers, rose up before us, as we moved along over the Prairie; and not infrequently, the Prairie hen slowly ascended from the ground just high enough to be above the grass, and sailed along, a short distance in the air, and alighted on the earth."

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