

## SEEDS OF SUCCESS

By Todd Bittner

The success or failure of conservation work, in many cases, can not be determined for years, decades, or even generations. For one ambitious effort involving the introduction of a federally threatened species to the prairies and wetlands at Nachusa Grasslands, the answer was worth an eight year wait.

The eastern prairie fringed orchid (*Platanthera leucophaea*) historically ranged throughout the moist tall-grass prairies in the “prairie peninsula” that swept eastward into Illinois and Indiana — including most counties in the northern two-thirds of Illinois. Destruction of prairie habitat dramatically reduced its populations to about two dozen statewide by the mid-1990’s. Some early efforts to introduce new populations from seed proved to be successful if the recipient site possessed a necessary (but at the time unidentified) mycorrhizal fungi associated with the roots, and the seed was planted in appropriate habitat.

In the fall of 1996, two teaspoons of the dust-sized seed of eastern prairie fringed orchid were diluted with sand and hand-broadcast into designated areas at Nachusa Grasslands. The orchids were hand pollinated that summer at Wadsworth Prairie in Lake County. The seeds were collected that fall, with the assistance of June Kiebler and the Volunteer Stewardship Network. All this was after considerable planning and consultation with involved conservation agencies including The Nature Conservancy, Illinois Department of Natural Resources, U.S. Fish & Wildlife Service, Illinois Endangered Species Protection Board, Illinois Nature Preserves Commission, Lake County Forest Preserve District, and the Morton Arboretum.

One habitat for the introduction was the newly restored wetland in the Prairie Potholes Unit. This site had been cropped for several decades and seed from wetland and mesic species was planted from 1990 to 1992. However, in 1995 when a three-mile maze of field tile was dug up with heavy equipment and rendered dysfunctional, the success of this grand restoration endeavor was evident immediately—and the wetland became truly wet again. The seed bank and the planted seeds sprang to life and a wet prairie began to re-emerge. In



Todd Bittner

2001, a problem with too much water leaving the site through an erosion ditch was corrected by plugging the ditch with soil and a simple water control device.

Early this past summer, seven years following the introduction of the orchid seed, Chris and Jennifer Hauser discovered three eastern prairie fringed orchids in full glorious bloom in the Prairie Potholes wetland. The presence of these plants not only speaks to the success of the planning and execution that went into the introduction effort, but further supports and validates the success of the wetland restoration, for the seeds sown would not have thrived without the restored hydrology.

This early introduction success will help in the recovery of this federally rare species by establishing another viable population and by adding to the overall knowledge about this species and its requirements.

Introductions at other sites have continued as part of the recovery plan for this species. This past fall saw the most concerted effort to date in northern Illinois. Seed was planted at a host of new sites, including Green River State Wildlife Area in Lee County. From past experience, flowering adults commonly show up about six to seven years after planting, so we may be seeing new plants in 2010.



Chris Hauser with orchid

# Managers Notebook

By Bill Kleiman, Preserve Manager and Susan Kleiman, Restoration Specialist



**Brush Clearing at Scale:** Several grants from different agencies have allowed immense amounts of brush clearing at Nachusa Grasslands in the last twelve months. The grants came from the Illinois DNR's C2000 program, the National Fish and Wildlife Foundation, Commonwealth Edison Foundation, U.S. Forest Service, and Howard Buffett. With these grants we have been able to catch up with 150 years of fire suppression.

One contractor used a rubber tracked forestry mower that could pulverize brush and small trees, clearing h u g e swaths of wetlands, prairies, and opening up oak woodlands. The mower went day after day from dawn to dusk. The other contractor used a three wheeled tree cutter, two log skidders, a massive tree chipper, and a fleet of semi trucks. He cleared the larger trees like



cherry, elm, and box elder from fencerows, wetlands, and other habitats. His crew hauled out over 130 semi-



loads of wood chips to make cardboard boxes, and many loads of logs for firewood or boards.

The machines clear in a few minutes what would take a hardy volunteer crew all day. We are very thankful for the grants that made this work possible.



**Before and after power post H**



**White House Tract:** The Nature Conservancy purchased a 30-acre tract that contains high quality prairie adjacent to the huge Hamill Winter Prairie unit on Lowden Road. Included with the tract is a single-family ranch house that will be split off and sold with a smaller acreage this spring. (Looking for a home to buy? Maybe buy this one and then give it back to the preserve in a life estate? Contact Viv Bennett, our Land Protection Manager, at 309-636-3331.)

**1,200-acres on Fire:** Last fall and spring our prescribed fire crew successfully burned woodlands, savanna, prairie and wetlands around the preserve and nearby natural areas. The crew is made up of volunteers and led by preserve staff. We have experienced crewmembers,



Fire Crew

good equipment, fire breaks that are wide and clear, and a strong appreciation of the benefits of fire.

**Stream Work:** With a grant from Illinois DNR's C2000 program we completed a stream restoration project on a stretch of Franklin Creek running through the Jay Meiners Wetlands unit. This stream section was ditched in the 1950s. Our seasonal crew, preserve staff and a contractor used a backhoe and all terrain dump trucks to carry heavy limestone rock and created four rock riffles (100 tons per riffle). We also sloped back some vertical banks that were eroding severely and lowered several streamside terraces to decrease stream bank erosion at flood.

This work is what you do if you are on the bottom half of a watershed and have a ditched section of creek. The 30,000-acre Franklin Creek watershed has the same problems as other Illinois watersheds: rainfall is passed very quickly from each property downhill to the next and enters the creek in silty torrents. This altered hydrology and the ditching of our section made the creek down-cut several feet causing it to drain the adjacent wetlands and leave tall unstable stream banks that erode in flood.

The work we did will have several benefits which include the raising of the low flow stream height, increasing the moisture of adjacent wetlands, creating better fish spawning habitat, and decreasing bank erosion. But the more powerful stream restoration work we have done over the years has been to plant and restore prairie, savanna and wetlands - habitats that hold water like massive sponges.



Al and Hank hand collecting seeds

**Harvesting seed:** Our volunteers and seasonal crew handpicked and machine harvested over 2000 pounds from over 175 species of plants. The seed was planted in new plantings, as over-seeding in older plantings, and in areas cleared of brush.

**Steward Al Meier:** We have many fine volunteers. Al is one who comes all the way from Bloomington several times a month. He has been a Co-steward with Hank and Becky Hartman on the Big Woods Unit for two years. Al enjoys working hard and learning all aspects of stewardship from plant and seed identification to chain saws, fire and herbicide use. He works hard and gets a lot done. Thank you, Al.

**Species noted:** On April 13, 2003 we had the thrill of observing five endangered whooping cranes fly over the preserve! Also two sightings of the threatened Franklin's ground squirrel by two experienced observers on two different days give us hope that our reintroduction of these elusive squirrels has been successful. New insects were also found during our first insect identifying "bioblitz" (see related article). And each year new plants continue to be "discovered" or found in greater abundance than before.

**Science:** We continue to have bird and butterfly monitoring at the preserve. Ann Haverstock has been conducting her breeding bird census on the prairie for ten years. Jan Grainger, Mike Adolph and others have monitoring routes on the preserve to look for butterflies.

## *Wish List*

- Each management unit would welcome additional team members. Volunteers are empowered to do as much stewardship as they want: everything from hand collecting seed to prescribed fire.
- Equipment Maintenance Steward: we need a volunteer about one day per week to do maintenance on our chainsaws, hand tools, small engines, trucks, and tractor.
- Youth Stewards Leaders: volunteers needed to increase our pool of field trip leaders for our unique Nachusa Grasslands Youth Stewards Program. This would be four mornings a year leading a small group of children (5-6) in enjoying the native plants and birds.

### **Equipment Needs:**

- Power Point Projector
- Snow plow
- New desk top photo-copier

# The Seasons Of Stewardship

By Mary Vieregg

What do land stewards do all year out at Nachusa Grasslands? How do they spend their time on those cold winter days? On those intoxicating first days of spring? In the heat of the blazing summer sun? On those melancholy but brilliantly golden days of autumn?

As I think about answering these questions, I am reminded of the passage from The Outermost House by Henry Beston which reads “A year indoors is a journey along a paper calendar; a year in outer Nature is the accomplishment of a tremendous ritual.” Ritual in the sense of stewardship refers to the repeated series of acts that require our attention as the seasons pass. They are directed not by religious law or social custom but by the natural rhythms of the land as the year goes by. We respond to the land of Nachusa Grasslands as it responds to what Beston calls the “pilgrimages of the sun”. We try with the best of our knowledge and abilities to help it heal itself and maintain itself by working with it as the months pass by.

There is no time of the year when there is nothing to do, and there is no time of the year when there is only one thing to be done. The ritual tasks blend and overlap depending on the needs of the land and the resources available to respond, but generally, this is how it goes.

In the winter, the weather can be challenging but it also creates opportunities. The plants have become dormant, the leaves have fallen, and ideally, the ground has frozen. It is the time when invasive trees and brush can be cleared and burned without trampling prairie and woodland forbs or unduly disturbing the soil surface. Stewards use both hand and power tools to cut trees and brush. The cold weather makes it easier to work hard physically for longer periods of time and to feed a fire with the cuttings. Brush and tree stumps are treated with herbicide so that they won't resprout when spring arrives undoing all of the winter's work. The bareness of the land makes it easier to see the basic structure of it, and the land rewards the stewards with immediate gratification for their hard work.

Winter is also the time when stewards think and plan. They record and ponder the previous seasons' efforts—the seeds that were collected and where they were planted, the patterns of growth of both native and non-native plants in their units, the way the water moved over the land during the heavy rains. They use the long hours of darkness to plan for the coming growing season—what weeds they will concentrate on in the spring, how and where they will monitor species and their abundance, what weed control techniques to try in a certain problem area, what seeds to concentrate on collecting for what areas, what erosion control techniques to use to encourage the healing of gullied channels, how much of their time they will spend working and how much they will spend absorbing the rewards of the rituals.

The sun continues its patient pilgrimage as stewards impatiently await the beginning of the parade that comes with spring. In spare moments, they quietly search the low areas for the first sign of blooming skunk cabbage or marsh marigolds, and the upland areas for pussytoes and the woodlands for spring beauty. They listen for the first



Meadow Rose  
(*Rosa blanda*)

callings of frogs and look for the first returning birds which trickle back at first and then come in floods as an occasional balmy day teases the stewards into thinking that the cold, damp winter weather of northern Illinois is over for another year. One day, the steward puts away the chain saw and says, “Enough”, and on that day spring really begins.

Springtime brings a frenzy of activity. Plant monitoring begins. What is growing and where? What is not? Weed monitoring and control begins. Catch the wild parsnip, sweet clover, multiflora rose, reed canary grass, field hawkweed, and other miscreants before they spread! Nip them in the bud! Have we found them all?! There are early seeds to collect. Will we miss the window for collecting pasque flower seeds again this year? Has anyone successfully collected seeds from Dutchman's Breeches!? Fire season begins. Are the pumps on the trucks? Is all the equipment working? Do we have enough volunteers? Are they trained? What direction is the wind from? What is the humidity? Are the firebreaks ready? Will it ever dry out so we can burn? Every day, the sun is higher and the days are longer, but they seem shorter because there is so very much to do.

Soon, there are too many birds mating and nesting and native plants breaking dormancy in the wetlands, woodlands, and prairies of Nachusa Grasslands to burn any more. The pumps are taken off the trucks, and the water buffalo goes back into storage for a few months as the parade of life moves along through late spring and into the summer. Depending on their interests and the needs of their units, stewards continue to monitor and control weeds and steadily add to the list of seeds collected. They may clear brush, too, especially along firebreaks in units where fall burning is anticipated. Some areas will be mowed to discourage non-native grasses and weeds like bull thistle from going to seed. Some monitors are “specialists” monitoring butterfly or bird populations or seeking out new plants to include in the preserve herbarium. Another seeks out rare species mentioned historically but not seen recently. Can they be found again?

The stewards respond to the steady, predictable, and miraculous plant rhythms of growing, flowering, and going to seed by falling into their own predictable wanderings of observation and action. The arrow-leaved violet seeds are ready. Now, the lupines are ready (if the deer haven't eaten them all). Next come the white-haired and long-stemmed panic grasses. Soon the porcupine grass and the puccoons will be ripe for picking. And so it goes as the sun, as Beston says, "pauses ritually on the steps of the summer months, the disk of flame overflowing."

Caught up in the bounty of Nachusa Grasslands' diversity and rolling landscapes, stewards only occasionally pause to ponder how quickly the year is passing. Once in a while, someone will say, "Is it time already for the pasture rose to be blooming?" "Isn't it too early for the sunflowers?" "Do the silphiums seem to be blooming earlier than usual?" "Can it really be time for the blazing star and gayfeather to be blooming?" The other stewards smile because they too have paused to consider the rapid passage of time and have seen it in the parade of plants and have heard it in the quieting of the birds and the increasing wing-chirping of the crickets.

Stewards move into late summer and early autumn anticipating the peak of seed collecting and what many consider to be the most beautiful time of the prairie year. The asters and goldenrods begin to bloom just as the prairie grasses reach their crescendo in both height and color. Seeds ripen in abundance and are collected with haste on golden, blue-sky days. Much of the weed control has ended; they too have gone to seed, and it's too late. Maybe we'll get them all next year. The days get shorter; the evenings get cooler. The sun's pilgrimage has turned decidedly south.

Two important rituals of our "year in outer Nature" still remain: fall burning and planting. The fall burn season is a repeat of the spring burn season: the turmoil of preparation, the wait for suitable conditions, the satisfaction of blackened prairie ready to warm quickly when the tentative sunny days of early spring arrive. How long will we be able to burn? Will autumn be wet and cold, or will it be one of those dry and windy northern Illinois autumns that give us burning opportunities into December? Eventually, the day comes when we know that the burn season is over. The pumps are drained and freeze protected and removed from the trucks.

Planting seed that has been collected over the growing season is truly a ritual bound in faith and hope. The goal is to plant the hundreds of different species of collected seed where they will each have the opportunity to thrive within a healthy ecological community. Stewards working in areas that are being restored or in areas that are in later stages of reconstruction sometimes plant their seeds as they collect them into already existing plant communities. Stewards who are recreating plant communities in former crop fields dry and save their seed until after the crops have been harvested and the soil prepared. The entire process of collecting, drying, and processing seed and then sorting species of seed into

suitable mixes for different planting locations is an intellectual challenge requiring intimate knowledge of the plants as well as the seeding locations, but it is also a delight to the senses. The seed of each species is unique: round, soft, hard, tan, yellowish, feathery, white, bristly, sweet-smelling, long, short, sticky, tiny, peppery, fly-away, oblong, reddish, sour-smelling. Each one is a player in what Beston calls "the creative pageant...the endless and incredible experiment...of Nature". Participating in this entire process is being part of "a symphony thundering through debatable existences of time". It is a challenge, and it is a joy.

The first snowfall of winter tells us that our year in outer Nature has come full circle. Its rituals have indeed been dictated by the natural rhythms of Nachusa Grasslands, and they will be repeated as the seasons flow onward. We have seen "the ritual of the sun"; we have "shared the elemental world".

## **In Memory:**

### **Judith Hill (1941-2003)**

For over three decades Judy searched for prairies with Doug and Dot Wade, finding numerous gems, one of which became Nachusa Grasslands.

## ***From the Visitor's Book***

"This place was tough to find, but well worth it."

"Meriweather Lewis and Wm. Clark would have made notes in their journal."

"Grass was so high it was cool. Keep it growing."

"It was great to see how Illinois land used to be."

"Glad to see you are expanding and improving."

"Please spray for weeds."

## **PRESCRIBED FIRE FIELD TRAINING**

At Nachusa Grasslands

Hosted by The Nature Conservancy and the Volunteer Stewardship Network  
Saturday, April 17, 2004 10:00 am to 3:00pm.

RSVP and information with Karen Billo at 866-VSN-LINE (876-5463) or [kbillo@tnc.org](mailto:kbillo@tnc.org).

Limited registration.

## Stewards Journal



**Mary Vieregg**

After more than three years of being a volunteer steward at Nachusa Grasslands, it seems unbelievable to say that every day is still a new adventure. How do I select only one or two highlights to share? Do I begin by recounting the time I sat taking a break on a tree stump along John's Creek watching and listening to two pairs of vocalizing red-tailed hawks? Do I continue by describing the cold, winter day I pondered an old, dying willow while birds of seven different species lighted on it looking for insects, rest, or shelter? Do I risk sounding silly trying to explain how giddy I felt when I discovered and collected the bright red berries of yellow honeysuckle (*Lonicera proliifera*) after Mike Adolph and Bob Shone led me to them one hot summer afternoon? Maybe I could try to convey the satisfaction I felt as I finished my seed collecting season by collecting seeds from the fringed gentian (*Gentiana crinita*), the last of almost 200 species I have come to know and collect seed from during the past three years. Perhaps I could conclude by sharing the glorious fall afternoon when Tom Mitchell and I explored the nooks and crannies of Tellabs Savanna looking for seeds of marbleseed (*Onosmodium hispidissimum*) to plant in other suitable locations of the preserve. The sky was azure blue, the sun was pleasantly warm, the blooming ironweed (*Vernonia fasciculata*) was deep purplish-rose, and the marble "seeds" sat calmly and abundantly in the leaf axils of the plants resting on the knolls. We cherished our good fortune at being granted such a day in such a place. Alas, it is impossible to know where to begin or end.



**Bob Shone**

It is exciting to discover how *Corylus americana* (American hazelnut) is thriving in the five-oak lower savanna of the Hamill Winter Prairie. This valuable shrub competes quite well with the "usual suspects" of invasive woody shrubs (honeysuckle, multiflora rose and black cherry) and has populated to the extent of some 32 medium to large colonies that are located mostly in the west end of the savanna with some five colonies appearing in the eastern terminus. Just to punctuate this "spreading plague" of hazelnut, Mike Adolph and myself found two or three colonies in the higher oak savanna. It's everywhere! To compound our pleasure we also "discovered" two specimens of a native honeysuckle vine, *Lonicera proliifera*, in the same thickets along with virgin's bower (*Clematis virginiana*) another interesting vine that blooms in late summer and produces a buoyant, white and fluffy wind-borne seed that is reminiscent of common milkweed.

In August I found a prominent stand of *Rudbeckia laciniata* (called wild golden glow, tall coneflower, or green-headed coneflower) along Franklin Creek at the far western edge of Tellabs Savanna. This striking plant that likes edge and moist environments, could easily be missed in the acres of wingstem (*Actinomeris alternifolia*) that populate the same area!



**Al Meier**

I spend most of my weekdays sitting at a desk working on a computer, so I volunteer at Nachusa on the weekends in order to re-connect with nature. I've always spent a lot of time outdoors, mainly hiking and biking, but since I've been volunteering at Nachusa, I've achieved a more intimate awareness of nature—learning to identify the prairie species and understanding their role in the ecosystem. What I may have hiked by in the past, I now take the time to stop, examine, and identify from one of my field guides. But most important, after working at Nachusa for the day, I can actually see the results of my labor. Instead of just worrying about the deteriorating state of the planet, I'm actually contributing to the preservation of biodiversity in Illinois.



**Cassie Krueger**

I dislike yard and garden work, and killed all of my houseplants long ago. I can barely tell one plant from another, let alone remember their scientific names. How did I ever end up working on a prairie restoration project—as a co-steward, no less? The past year has been a time of discovery for me, not only of the wonders of Nachusa Grasslands, but within myself.

All the people I have met at Nachusa Grasslands are patient and enthusiastic teachers who willingly give their time, energy, and vast knowledge. When Mike Crowe suggested that I become a co-steward of East Heinkel, I protested that I had no experience or education in any related areas. His reply was one that I have heard many times since from lots of folks there, "Oh, we can teach you what you need to know."

Everybody I have met has been a source of encouragement and inspiration. I have had a great time cutting trees, pulling weeds, clearing brush, gathering seeds, and even setting a fire or two. Last spring, as fresh new growth emerged through the ragged remnants of winter, it occurred to me that at some point during the summer, a bird or butterfly would land to rest on some green thing that had grown because I had been there. It was quite a lesson, and I thank all of my teachers for their help and guidance.





**Ron Ingraham**

Early in 2003 a brush cutting machine, the Geoboy, was hired to thin invasive brush and an abundance of small trees. This brush had accumulated slowly over the years mainly due to lack of fire. The Geoboy is a huge rubber tracked machine with a flail type mower. It cleared a sedge meadow near Franklin Creek in the southwest corner of Tellabs Savanna and thinned small trees in selected upland areas. This now sunny open ground will support the continued dominance of oaks and will increase the health of the wetland and savanna habitats.



**Before and after brush thinning at Tellabs Savanna**



Two years of spring burns have burned off a lot of the shredded wood and eliminated a large percentage of the European honeysuckle and greatly diminished the weed, garlic mustard. There are positive signs of healthy plants in the sedge meadow and savanna.



**RESOURCE MANAGERS OPEN HOUSE**

I thank The Nature Conservancy for purchasing this fine habitat and for supporting the vigorous work done there.

**Dwight Heckert**

When you were a kid, did you enjoy participating in treasure hunts? With a map in hand and a list of treasures to be found, one would look in every nook and cranny to find the items on the list.

That is how it feels every time I go out on the prairie at Nachusa Grasslands. For you see, I have the pleasure of being the steward of the herbarium. Mike Adolph has been kind enough to provide me with a list of plants that should be on the prairie. I then try to find them, collect, press, and dry them and then place them in the herbarium. Over the last five years, 507 species have been collected.

They say that it is hard to return to your childhood. But treasure hunting at Nachusa Grasslands is about as close as it gets.



**Chris and Jennifer Hauser**

This was a great year for rare plants in and around our unit. In June, we used nylon stockings to cover the seed heads of the rare Hill's thistle (*Cirsium hillii*) on some of the remnant knobs in order to prevent birds from eating the seeds. About a week later we returned to collect half the seeds, the rest we scattered around the parent plants. The seeds we collected were cleaned and sown on potting soil in a greenhouse and within a week they were starting to germinate. As of December 2003, we have 90 tiny Hill's thistle seedlings in the headquarters barn waiting for winter to end, and this coming spring we

will plant them on the dry slopes surrounding the wetlands.

In August, Chris found some paperwork from the 1977 Natural Areas Inventory. It described the location of the state threatened forked aster (*Aster furcatus*) along the west boundary of the preserve. Forked aster grows naturally in only about 50 locations in the world, making it one of the rarest plants at Nachusa Grasslands. After consulting books and websites to learn to identify this non-descript species, Chris and Susan Kleiman found a total of 4 patches of these plants. They were doing quite well, and some of the patches may have expanded since they were last seen in 1977. We will continue to monitor these patches regularly.



**Butternut Hickory**



**Jan Grainger**

On a splendid Sunday in late April in 2003, as I was wandering around the perimeter of one of the ponds at the wetland in the Tellabs Savanna, I noticed something that was vividly yellow in the pond's center. As I moved in closer to get a better look, it became

clear that it was the neck of a fairly large turtle, a Blanding's turtle. Most of its dark, dome shaped carapace was above the water surface and the bright yellow that I had first noticed was the animal's chin and throat. Its head jutted out of the water in a pose held for some time while I admired the scene.



Blanding's turtle here was in ideal habitat, since they are usually found in or around water, dining on snails, crayfish and other invertebrates. This is a species considered threatened (in Illinois) mostly by habitat destruction.

This area, as the summer passed, became much drier. The pond became mud. The fall brought some rain to fill the pond again. It is my hope that this species will continue to find a home at Nachusa Grasslands.

**Mary Blackmore**

Browsing goats once again will be present at the Clear Creek Prairie unit in 2004. Goats prefer to browse (eat the twigs and leaves of woody vegetation) rather than graze. The experiment is to confine them to certain plots on the prairie and test the hypothesis that defoliation of invasive woody species by goats is an effective control measure on those species (such as multiflora rose). So far, browsing three times during the growing season, occasional fire, and the hand-girdling of larger trees is yielding good results.

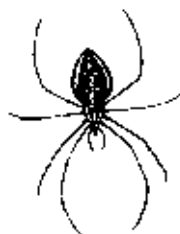


**Sally Baumgardner**

Here's a "Teachable Moment" — a highlight — with fifth graders from Chana School.

Students are always hoping to see a "wild animal," and, yes, grasshoppers are wild animals. We found a large, platter-shaped web of the golden garden spider, with its white zig-zag design, and the resident hanging upside down at the center top. With very active grasshoppers all around, one boy got a bright idea and asked excitedly, "What would happen if we caught a grasshopper and threw it into the web?"

Delighted with his proposal, I said, "Go ahead and do it." Everyone watched as a hapless



grasshopper was grabbed, tossed and snagged in the web. The spider noticed immediately, and moved efficiently over the non-sticky parts of the web. I softly explained what it was doing. The spider gave a quick bite to the grasshopper, injecting a kind of tranquilizer/preservative. I told of this predator's need to preserve its prey in case it wasn't hungry at that moment. The victim was then wrapped in silk, in a coma-like state, and the spider went back to its resting place at the top of the web.

I didn't even realize I was narrating this action until the "bright idea boy" turned to me and gasped, "Wow! This is better than television!"



**Mike Adolph**

Nachusa is something like my church. I'm in touch with very large forces that reach all the way back. Seeing a bit of what used to be, and helping that used-to-be along—touches me at a deep level. We keep finding more bits: new plants, new sightings of animals... I'm

learning more, which is very gratifying, and it's coming from lots of good teachers.

**Thank You**

*to the following people for their generous donations:*

- John Santucci for a safety canopy for our tractor
- Al and Mary Meier
- Genesis Nursery (Dennis Lubbs and Cathy Motto)
- Mary Scott
- Elise Bittner
- Jeannie and Tom Lawson in memory of Russell Lawson
- Kay McKeen in honor of co-workers Jenny Bell, Jessica Meyers, and Helen Bartlett
- Betty McGoon in honor of her daughter, Susan Coulter
- Dean Weidman
- Wild Ones Rock River Valley Chapter for several books for our library
- Al Roloff for a seed fanning mill
- Eric and Sandy Brubaker for furnishings for our seasonal housing and loan of tools
- Crest Foods, Inc. for maintaining our mailing list

**Special thanks to the following stewards for our new seed planter:**

- Al and Mary Meier, Gerald McDermott, Mary and Jim Vieregg and Ron and Pat Ingraham





# Status Report of Two Rare Species

By Russell Brunner

{Editor's note: Russ is the new volunteer steward of the Sand Farm Unit and worked at the preserve in 2002. He is now working for the Byron Forest Preserve District.}

During the summer of 2003, I conducted a count of the rare Hill's thistle, *Cirsium hillii*, at Nachusa Grasslands. Hill's thistle is a relatively short-lived perennial that generally produces basal rosettes for one or two years and typically flowers at three years. The plant produces a single, large pink flower with a June to July bloom range. Seed production is abundant with wind being the seed dispersal agent. Hill's thistle is most commonly found in dry upland sand and gravel prairies with adequate bare soil for seed germination. Habitat loss, fire suppression, and overgrazing are important factors in the rare status of this plant. Federally, *Cirsium hillii* is recognized as a species of concern. Within Illinois, the native thistle is listed as a threatened species.

Using location maps from a 1995 *Cirsium hillii* count at the preserve, I searched for and counted flowering and non-flowering plants. While the 1995 count located more than 500 plants, the results of the 2003 count



(1,214 plants) seem to show that this perennial is expanding in numbers under the preserve's restoration and management practices.

During the summer of 2003, I also searched for the rare *Asclepias lanuginosa*. With a recent property acquisition, hopes of again seeing *Asclepias lanuginosa*, the Illinois endangered woolly milkweed, may become a reality. This small milkweed was witnessed on the property in the past but has not been seen there for more than a decade. Woolly milkweed rarely exceeds a height of eight inches and the plant's rather small light green flowers make it quite difficult to spot. This year the search was unsuccessful in regards to locating any woolly milkweed plants. The newly acquired land had been used as pasture for several years. With the removal of grazing, the return of fire, and the removal of undesirable brush and invasive species, we can

hope to see this endangered plant in the coming years.

Although no plants were found in 2003, woolly milkweed is still known in the area. Its habitats include dry hill prairies underlain with sand, gravel, or dolomite. There are at least four populations on the dry dolomite hills of the main unit at the Byron Prairie Preserve. While the very existence of a list of endangered species is quite disheartening, I find it very satisfying to know that many of those rare species are found at sites like Nachusa Grasslands.



Fire Crew: Becky Flack, Bonnie Wolf and Marit Haug



Mike Hansen and Gene Miller

"Today I just needed to get away and clear my head. I went for a drive, and look what I stumbled across: **simple, beautiful, perfect.**"

# Bug Bioblitz

By Chris Hauser



While we know a lot of the different species of plants, mammals, and birds found at Nachusa Grasslands, we know much less about the insects that are living here. This lack of knowledge, coupled with the discovery of a new state record species of caddisfly in Wade Creek in 2002, gave birth to the idea to hold a “bug bioblitz,” a 24-hour sprint of collecting, preserving, and identifying as many insect species as possible. Bioblitzes quickly create a rough inventory of the total biodiversity of plants, animals, and fungi within a natural area. However, we decided to concentrate exclusively on insects because we knew there was so much to learn.

The 24-hour event started at 10:00 am Saturday, August 2 with a small group of professional entomologists from the Illinois Natural History Survey, the University of Illinois at Urbana-Champaign, and the Missouri Botanic Garden, and with valuable help from a dozen dedicated Nachusa staff and volunteers. By the end of the event, entomologists and volunteers collected and identified at least 208 different species of insects. Most were identified to the species level, with some identified to the genus level.

Chris Dietrich and several of his top-notch graduate students used customized vacuums and butterfly nets to pluck insects off the prairie plants for live identification, finding 94 species of hoppers (including leafhoppers, treehoppers, and froghoppers, all related to cicadas). Chris found that the most conservative (most dependent on high quality prairie) hopper species were found at the Carpenter Prairie Unit.

Ed DeWalt and John Hoekstra sloshed through creeks, seeps, and marshes to find 67 species of aquatic insects, including beetles, dragonflies, damselflies, mayflies, and caddisflies. Ed was also a crucial part of conceiving, planning, and coordinating the event.

James Trager carefully sampled Doug’s Knob, the Fen Unit, and several woodlands, finding a total of 31 species of ants. One sampling technique used tiny piles of tuna to attract foraging ants from the surrounding prairie.

James Sternburg and John Bouseman briefly surveyed several prairie areas, finding 14 species of butterflies. You may recognize this pair as the co-authors of the recently released Field Guide to Butterflies of Illinois, published by the Illinois Natural History Survey.

While this insect blitz gave a fairly comprehensive survey of the ants and hoppers, we were not able to focus sufficiently on the more diverse species-rich groups such as the beetles, moths, flies, bees, and wasps. It is likely that Nachusa Grasslands is home to thousands of species of insects, so we will continue to inventory the rich insect diversity in the years to come.

## STEWARDS OF NACHUSA GRASSLANDS

Bruce Boyd State Director  
Bill Kleiman Preserve Manager  
Susan Kleiman Resotration Specialist

### STEWARDS

#### Big Woods

Hank & Becky Hartman

#### Clear Creek Prairie

Prairie Preservation Society  
of Ogle County

#### Dot & Doug Wade Prairie

#### Edith & Anna Heinkel Savanna

##### East Unit

Mike Crowe

##### West Unit

Jay Stacy

#### Eight Oaks Savanna

Jan Grainger

#### Fen Unit

Kevin Kaltenbach

#### Hook Larson Prairie

Dave Breen

#### Kittentail Savanna

West Chicago

Prairie Stewardship Group

#### Hamill Winter Prairie (formerly: Main Unit)

Mike Adolph

#### Prairie Potholes

Chris Hauser

#### Roadsides & Jay Meiners Wetlands

Tom Mitchell

#### Rolling Thunder & Harold Walkup Prairies

Sally Baumgardner

#### Sand Farm

Russ Brunner

#### Schafer Prairie

David Edelbach

#### Tellabs Savanna

Ron Ingraham

#### Thelma Carpenter Prairie

Tom Mitchell

#### Barn Steward

Jenny Mitchell

#### Autumn On The Prairie 2004 Chair:

Mike Adolph

#### Science Stewards:

Bird Monitoring

Butterfly Monitoring

Herbarium Steward

Insect Collector

Lespedza leptostachya monitor

Photo Monitor

#### Outreach Volunteers:

Publicist/Educator/Presenters

Youth Stewards Leaders

State Director

Preserve Manager

Resotration Specialist

### CO-STEWARDS

Al Meier

Mary Blackmore

Terri Clark

Barb Regan

Cassie Krueger

Mary Vieregg, Don Homer

Gene Miller

Steve Sentoff

Bob Shone

Jennifer Hauser

Jenny Mitchell

Max Baumgardner

Earl Thomas

Gerald McDermott

Ray Derksen

Jan Grainger, Bob Shone

Jenny Mitchell, Bob Bartles

Ann Haverstock

Jan Grainger

Dwight Heckert

Chris Hauser

Todd Bittner

Gerald McDermott

Sally Baumgardner, Gene

Miller, Dwight Heckert

Mike Adolph, Carol Bartles,

Sally Baumgardner, Howard

Fox, Ron Ingraham, Hazel

Reuter, Barb Rutherford

# CALENDAR FOR STEWARDSHIP WORKDAYS 2004

Volunteer Stewards and Co-stewards lead workdays. New volunteers are always welcome to come learn and have fun with us. Start time is 9:00 A.M. Meet at the Preserve Headquarters (red barn) at 8772 S. Lowden Road. Volunteers break for lunch at the Barn and then sometimes continue stewardship or go for a hike in the afternoon as the group desires or weather permits. We also have stewardship during the week (give us a call at 815 456-2340).

## **March** - Brush and Planting Season

- 6 Big Woods and Fen
- 13 Hook Larson Prairie & Schafer Prairie
- 20 Tellabs Savanna and Rolling Thunder Prairie and  
**Vernal Equinox**
- 27 Prairie Potholes and Eight Oaks Savanna

## **April** - Brush, Planting and Fire Season

- 3 East Heinkel Savanna and Rolling Thunder Prairie
- 10 Hamill Winter Prairie and Tellabs Savanna and  
**ANNUAL SKUNK CABBAGE TOUR with Tim Keller (at 2 P.M.)**
- 17 Dot & Doug Wade Prairie - Special Project, Chris Hauser
- 24 Big Woods and Schafer Prairie and Hook Larson Prairie  
*(Autumn On The Prairie (AOTP) Committee Meeting at noon)*

## **May** - Weed Season

- 1 Hamill Winter Prairie and Tellabs Savanna
- 8 Hook Larson Prairie and Rolling Thunder Prairie and Thelma Carpenter Prairie
- 15 Prairie Potholes and East Heinkel Savanna and  
**Potluck Gathering (meal at 12:30)**
- 22 Sand Farm
- 29 Schafer Prairie and Dot & Doug Wade Prairie

## **June** - Weed and Seed Collecting Season

- 5 Hamill Winter Prairie and Thelma Carpenter Prairie
- 12 Eight Oaks Savanna and Schafer Prairie
- 19 Sand Farm  
*(AOTP Committee Meeting at noon)*
- Summer Solstice on 21**
- 26 West Heinkel Savanna and Big Woods
- 27 Sun. Clear Creek Prairie

## **July** - Weeds and Seeds

- 3 Holiday
- 10 Prairie Potholes and Dot & Doug Wade Prairie
- 17 Schafer Prairie and Big Woods  
*(AOTP Committee Meeting at noon)*
- 24 Clear Creek Prairie and East Heinkel Savanna
- 31 Sand Farm

## **August** - Seeds

- 7 Hamill Winter Prairie and Big Woods
- 14 Tellabs Savanna and Thelma Carpenter Prairie
- 21 Eight Oaks Savanna and Rolling Thunder Prairie
- 28 Schafer Prairie and East Heinkel Savanna  
*(AOTP Committee Meeting at noon)*

## **September** - Seeds

- 4 Hook Larson Prairie and Prairie Potholes
- 11 AOTP Preparation Workday and Thelma Carpenter Prairie
- 18 **Autumn On The Prairie Celebration – 10 A.M. to 5 P.M.**  
**Autumnal Equinox on the 22**
- 25 Schafer Prairie and Dot & Doug Wade Prairie

## **October** - Seeds

- 2 Hamill Winter Prairie and Hook Larson Prairie
- 9 Eight Oaks Savanna and Tellabs Savanna
- 16 Kittentail Savanna and Shabbona Savanna - Special Project, Chris Hauser
- 23 Rolling Thunder Prairie and Thelma Carpenter Prairie
- 30 Schafer Prairie

## **November** - Brush, Planting and Fire Season

- 6 Fen and Eight Oaks Savanna
- 13 Thelma Carpenter Prairie and Big Woods
- 20 **Seed Mixing Celebration and Potluck Gathering**
- 27 Schafer Prairie and Prairie Potholes and Sand Farm

## **December** - Brush and Planting Season

- 4 Schafer Prairie and Hamill Winter Prairie
- 11 Hook Larson Prairie and Tellabs Savanna
- 18 East Heinkel Savanna  
**Winter Solstice on the 21**

## **January 2005** - Brush Season

- 1 Schafer Prairie
- 8 Tellabs Savanna
- 15 Big Woods and Hamill Winter Prairie and Hook Larson Prairie
- 22 Prairie Potholes and Eight Oaks Savanna
- 29 East Heinkel Savanna and Rolling Thunder Prairie

## **February 2005** - Brush Season

- 5 Fen
- 12 Schafer Prairie
- 19 Hook Larson Prairie and Rolling Thunder Prairie
- 26 West Heinkel Savanna and Tellabs Savanna

### AUTUMN ON THE PRAIRIE

15th Annual Celebration at Nachusa Grasslands  
Saturday, September 18, 2004, 10 a.m. - 5 p.m.

A free event for the whole family: guided walking tours of the preserve, paintings by local artists, children's activities, horse drawn wagon rides, live music, good food.

### Issue 41, March 2004

Editor . . . . . Susan Kleiman  
Associate Editors . . . . . Gerald McDermott,  
Bill Kleiman, Mary Vieregg, Carol Bartles

## REACHING NACHUSA GRASSLANDS

The preserve is open to the public. The main trail head to the preserve is at the Visitor Entrance with the kiosk. All volunteer workdays meet at the Preserve Headquarters red barn (located 1/2 mile north of Visitor Entrance) at 8772 S. Lowden Road up a long driveway.

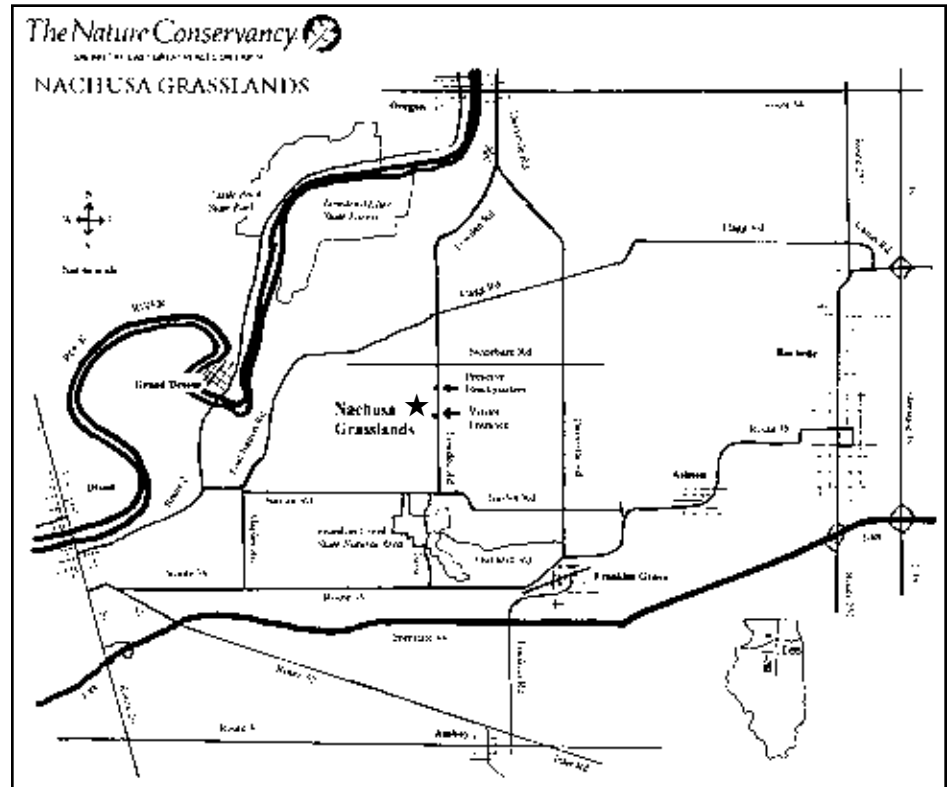
**From I-88 (East-West Tollway):** Exit at Rt. 251 North (Rochelle), to Rt. 38 West. Travel through Ashton and into Franklin Grove (approx. 16 miles), turn right (north) on Daysville Rd./1700E. Travel 1.5 miles north to Naylor Rd./1950N, turn left (west) and go 2.2 miles to Lowden Rd./1500E, turn right (north) and go 1 mile to Visitor Entrance (on the left with kiosk).

**From Route 64:** Just east of the Rock River in Oregon, turn south on Daysville Rd./1700E. Travel approx. 2.5 miles and turn right (45 angle) on Lowden Rd./1500E (Lowden-Miller State Forest). Travel south 5 miles to a 4-way stop at Flagg Rd. Continue south another 2 miles to the Visitor Entrance (on the right with kiosk).

### From Dixon:

**Option 1:** Take Rt. 38 East into Franklin Grove then turn left (north) on Daysville Rd./1700E. Travel 1.5 miles north to Naylor Rd./1950N, turn left (west) and go 2.2 miles to Lowden Rd./1500E, turn right (north) and go 1 mile to Visitor Entrance (on the left with kiosk).

**Option 2:** From downtown (Rt. 26/Galena Ave.) take Rt. 2 North two miles, then turn right (east) on Lost Nation Rd. Go one mile to Maples Rd./1150E, turn right, then left immediately onto Naylor Rd./1950N. Go east for 3.5 miles to Lowden Rd./1500E. Turn left (north) and go one mile to Visitor Entrance (on the left with kiosk).



Nachusa Grasslands is owned and operated by The Nature Conservancy, a private, non-profit group whose mission is to preserve plants, animals and natural communities that represent the diversity of life on Earth by protecting the lands and waters they need to survive.

*The Nature Conservancy*   
SAVING THE LAST GREAT PLACES ON EARTH

### *The Nature Conservancy*

Nachusa Grasslands Preserve  
8772 S. Lowden Road  
Franklin Grove, IL 61031  
(815) 456-2340  
www.nature.org

Non-Profit Org.  
U.S. Postage  
**PAID**  
Permit No. 6632  
Franklin Grove,  
Illinois 61031