The Nature Conservancy
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Annual Stewardship Report for 2009

Nachusa Grasslands
Celebrating 24 Years of Conservation

Prairie Smoke
Issue 47, March 2010

Why I Planted a Prairie

By Keith Anderson

Keith planting his first prairie.

For me, planting a prairie really wasn't a hard decision. I'd been volunteering for a few months and enjoyed working with various stewards in different areas of Nachusa Grasslands. With the encouragement and support of staff and stewards, I set out to accomplish something only a small number of people have done. My mission was to ***recreate*** a portion of Illinois' native landscape back to habitat that will help support native species of flora and fauna. I even like to characterize this endeavor as creating a personal carbon offset.

The idea to invest myself in a planting happened through the suggestion of a steward, Jay Stacy, with whom I had been working closely. For the last few years, Jay and other stewards have been converting cropland in an area that borders a riparian zone along Clear Creek at the Clear Creek Knolls Unit. Jay thought I could get my conservation feet wet by doing a planting adjacent to an area that he planned to work on. Jay, along with Bernie and Cindy Buchholz, have been planting prairie there ever since the land was purchased in 2005 by TNC. Their goal was to have it completely transformed in a few years. Jay and I discussed how large an area I would restore; keeping in mind how much time I would be able to spend collecting seed. The goal was at least 40 pounds of seed per acre, and within that, at least 100 species of mesic to dry mesic forbs and grasses. With Jay's experience and commitment to help me, we decided that two acres was a realistic goal.

Jay and I met on Saturdays and even though we had a wet year, the weather always seemed perfect for us on the weekends. Often, we were accompanied by other volunteer stewards who came to Nachusa for the work days, and whose help was always appreciated. Collecting seed to recreate habitat is challenging. First, you need to harvest the plants that are appropriate for the soil conditions of your planting. Next, harvest at the correct time when the seed is mature keeping in mind the window of opportunity in some species is very limited. It requires keen observation on the readiness of various plants for seed harvesting, knowledge of where to find them, and the best techniques for harvesting the seed. I have no background or schooling in this kind of work, but what I did have was Jay and his encyclopedic knowledge of the flora at Nachusa Grasslands. We enjoyed many hours of camaraderie during the collecting season. With Jay's help, I gained a great deal of knowledge about the flora, and the techniques involved in recreating the endangered native Illinois landscape.

Keith with his son Dillon and fellow boy scouts helping plant seed.

The patience required to collect seed is worth the effort because of the rewards those seeds will reap. Although it will take some time for our careful labor to return the land to its native state, the more immediate reward for me is in the process. Volunteering at Nachusa is a perfect counter to the Monday-through-Friday routine; the work puts me into a rhythm that seems more natural. I like the feeling I have when volunteering at Nachusa.

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All photos taken by the Conservancy unless otherwise noted.

Species Count Illuminates

By Bernie Buchholz

Jay pointing at lead plant along with blazing star, pale purple coneflower, sedges, little blue stem and many more seedlings in this photo found in Bernie's and Jay's 2008 planting.

Species diversity is a goal of every prairie planting or restoration at Nachusa. Based on the recent inventory, the 2006 Gobbler Ridge plantings are on target with 134 species after three growing seasons. That's a good result from the 175 species planted. But bragging rights aside, why bother counting?

First, the results should quiet any lingering skeptic who questions whether high species diversity is obtainable from new field plantings. A similar result several years ago from the Naylor Road plantings resolved that issue for most observers. In fact, follow-up counts at Naylor now reflect over 175 species - a stunning achievement by Mary Vieregg and Jay Stacy.

Second, the inventory will direct overseeding efforts. Species not observed in appropriate numbers will be hand seeded over the next few years. In fact, 42 species have already been overseeded since the original planting. Between aggressive overseeding and the eventual emergence of slow growing species that have escaped observation, we hope the species count will eventually exceed 175 - the lofty standard set at Naylor Road.

Third, the inventory helps us adjust the seed weight ratios in subsequent Gobbler Ridge plantings. Reflecting on-the-ground reactions of seed to soil, hydrology, slope, aspect and plant associates, we will continue to tinker with the seed mix for each new planting.

Finally, over the longer term, occasional inventories will document plant succession. Early adventive plants that flourish in low competition settings - beach wormwood, sweet everlasting, ragwort, sleepy catch fly and black-eyed Susan, for example – will be crowded out as conservative plants like prairie dropseed, lead plant, little bluestem, and goat's rue slowly begin to dominate.

Over the decades, disturbance from large ungulates like buffalo will disrupt the conservatives and create openings for the return of the adventives – recreating the endless cycle of prairie renewal.

A species inventory helps restorationists grow high diversity plantings that provide nature the raw material to make a prairie. And don't forget bragging rights.

The ornate box turtle, appropriately named "ornate" which means elaborately decorated. Nachusa has one of the largest remaining populations of this threatened turtle in Illinois.

Looking Back

By John Schmadeke

1998 Johnny Creek flood plain full of weedy box elders - large bur oaks smothered in the background not visible.

There are moments when I am by myself at Nachusa and I suddenly realize how different the place looks from when I first saw it late in 1995.The big difference is the views. Two in particular strike me every time I go out.

I especially like the view from near the barn toward the south late in the afternoon. One can see unbroken prairie all the way over to Franklin Creek Natural Area. Also, stand along the ridge on Pussytoes Lane and look across the prairie to the west and north. I can see all the way to the west boundary in an uninterrupted vista. When I began at Nachusa there were several long fence rows with large stands of exotic trees that stood in the way of this view. We removed these fencerows to create large open prairie habitat that supports threatened and endangered wildlife. These trees acted as vectors for weeds and predators such as raccoons and opossums that predated the eggs of ground nesting birds. Now, the prairie and oak savannas to the west run uninterrupted from Naylor to Flagg road. Grasslands birds such as bobolinks, henslow's and grasshopper sparrows now flourish along with ornate box turtles and regal fritillaries. Other wildlife including deer, turkey, and pheasants are also thriving within this restored landscape.

Still standing atop Pussytoes Lane and looking northwest, the area that we call Prairie Potholes is now a wetland. When I first saw Nachusa, this area had very recently been cropland with drain tiles buried in the soil. Removing the tiles allowed water to accumulate in the area. A few years later several water control devices were installed along Wade Creek and some shallow wetlands were created. All these efforts have restored the hydrology in this area. Since then, thousands of native plants dormant in the seed bank have come back to life. See for yourself in early September when all the bottle gentians are blooming. Or stop out in the spring or fall to watch the sand hill cranes drop in.

Wade Creek itself has changed considerably over the years. At one time it was buried under a canopy of weedy box elder trees, exotic invasive species like multiflora rose and honeysuckle bushes. Two years' worth of brush work restored this area back to a native stream community where frogs, turtles, kingfishers, and mink thrive. At one time it was so difficult to reach the banks along Wade Creek that we had to walk down the center of the stream carrying herbicide buckets in order to treat weeds along the edge.

Lots of other sites at Nachusa have seen the same change. Hook Larson Prairie, for example, has had hundreds of exotic Siberian elms and other non native trees removed along with the honeysuckle growing underneath. Only recently beautiful patches of shooting stars and Virginia blue bells that had been unknown have burst back into life.

And finally, all the changes on the landscape are a direct result of the volunteer stewards and donations that have helped make this preserve one of the most exciting places to visit in the Midwest. During your next visit, take note of how busy Nachusa is with its two barns, a filled parking lot, and volunteers and seasonal workers all heading off with different tasks. In case you hadn't noticed, Nachusa has changed and is continually getting better each year.

2009 Johnny Creek flood plain after box elders removed – large bur oaks now visible and regenerating with a rich matrix of wet and wet mesic flood plain species such as wing stem, cup plant, and indigo bush.

World Renowned Wildland Fire Scholar Visits Nachusa

By Cody Considine

Bill Kleiman with Dr. Stephen Pyne last May

Below is an excerpt from ***People of the Prairie, People of Fire*** that was written by Dr. Stephen Pyne about Nachusa. Last May Dr. Pyne was the keynote speaker at Illinois' first annual prescribed fire council meeting in Chicago. We had the privilege of hosting Stephen at Nachusa for a day after the meeting. Dr. Pyne is an excellent writer and I think he really captured Nachusa's story. Dr. Pyne is a Regents Professor and a world recognized scholar on wildland fire. He has written over a dozen books on fire, including one just finished on fire in Canada. He is a great story teller and is astute on the politics of fire. He points out failures of policy, bureaucracy and politics that cause *bad* fires to happen – but not with a condemning tone. He highlights misinformation and good information and how they are used and sometimes misused by the media to send the wrong message. The complete essay is found on the web **http://www.wildfirelessons.net/Additional.aspx?Page=218.**

Nachusa Grasslands

In Illinois its prime expression is the Nachusa Grasslands managed by The Nature Conservancy. But Nachusa is becoming large (in relative terms) not because it has preserved an ancient landscape but because it is rebuilding one. Its core is a small ripple of rocky hills that escaped the plow and hence retained some native species.

In 1986 TNC purchased 400 acres. But around that atoll lay a platted sea of row-cropped maize. Over the course of 20 years the preserve has expanded to 2,000 acres, all purchased from willing sellers at market prices. Those acres must be brought into the system through a laborious process of restoration. By 2009 some 93 projects, ranging from two to 60 acres each, had expanded the dominion of prairie. Half the labor has come from volunteers.

It isn't enough to leave the acquired land to nature's touch: it will grow weeds. Instead prairie must be cultivated with even more tending than commercial crops; and there is little natural about the boundaries, which must follow the square-surveyed townships of settlement and the economic rhythms of commercial agriculture. Until they have the wherewithal to begin the conversion, they lease out the land for corn. Meanwhile, stewards gather seeds from existing prairie. They begin actual restoration – or more accurately, a reconstruction – by harvesting the corn, burning the stubble, and sowing a heavy mix of native seed, as much as 55 lbs/acre of 150-200 species. The next year, assorted plants will have rooted, along with a street-gang of weeds. Some weeds matter, and are clipped and individually herbicided; others will succumb as the indigenes thrive. What matters is removing the nasty species and stimulating the desired ones, especially the grasses like little bluestem, since they will carry fire over the plot, and fire is what sparks the system to life. The overseers burn as often and intensely as possible. Where desired plants flourish, they may overseed with more, and where some seem lacking, they may try again, and let nature determine the suitability of niches. Meanwhile, they burn. By the third year of tedious culling, a raw matrix of prairie grows on the site. When they determine the mix is more or less right, managers can begin backing off annual burns and feel their way toward a suitable cycle. Fires spread across the surveyed borders and suture the larger quilt of patches together. In this way the restoration reverses the frontier inscribed under the parameters of the Northwest Ordinance of 1787; and with so much work done by volunteers, the process resembles a kind of reverse homesteading.

*The contrast is not only with Kankakee (TNC-Kankakee Sands Project) but with such long-standing prairie sites as Konza (in the Flint Hills of Kansas), gazetted in 1982 as a Long-Term Ecological Reserve. Konza is the classic model of nature protection and its servant science: it was a preserved landscape (and hence "**natural**") that kept prairie continuously under a regimen of burning, and later grazing. Nachusa is a reconstructed landscape, resuscitated out of corn stubble and ragweed. As it challenges Konza in size, however, it may also challenge Konza's embodied conceptions of what constitutes prairie and what deserves sustained research, and perhaps may come to merit LTER standing as well.*

The fire story at Nachusa is simple enough to state. Fire initiates the conversion, and once it has worked that alchemy

repeated burning perpetuates the revived biota. Restoring prairie has meant restoring fire: this much is unexceptional, however quirky the process might appear to deep ecologists intrinsically wary of Roundup and flame. Rather, Nachusa's natural character resides in its present expression, not its history – or as William James famously described pragmatism, "By their fruits ye shall know them, not by their roots." Yet there is a second narrative of fire restoration at work as well, in which fire is returned not only to the land but to the hand. The reconstruction of Nachusa reinstates fire to ordinary people. The volunteers, who do much of the hard work of gathering and disseminating seeds, clearing invasive shrubs and weeding new acres, also do the burning. As much as reinstating big bluestem and lady fern, Nachusa has returned the torch to folk practitioners, the kind of fire wielders who sustained the prairie peninsula through millennia. The people of the new prairie have become people of the new fire.

This is a story easily lost among the attention paid to the traditional big-hitters of fire management, and it counters two trends. One is the grand narrative of Earthly fire by which industrial combustion has replaced open burning through technological substitution and outright suppression. This is why there is no fire on the still-farmed lands around Nachusa, why cooling towers from a nuclear-power plant loom over the northern horizon from the rebuilt barn that constitutes preserve headquarters, and why quads and tractors rather than draft animals fill the sheds. Nachusa is putting fire back on the land. The other trend is the systematic stripping of fire from the hands of the folk. The simplistic yet orthodox narrative for justifying the restoration of fire on public wildlands is that nature had set fires and misguided public agencies extinguished them, and the outcome is the shamble of present-day fire regimes.

Such a narrative implies that restoration means no longer suppressing nature's fires. It means that people have to quit interfering with nature's logic. Nature will then begin deleveraging the landscape into it proper state. Yet the record for virtually every landscape is that people had set most of history's fires, and this leads to the conclusion that the missing fires – those that have disappeared over the past century – are the result of people no longer acting as we have acted throughout our existence as a species. Less and less burning got done because there were fewer and fewer burners to do it. To be sure, not all of that erstwhile burning was prudent or systematic; much was abusive and promiscuous, and not a little simple fire littering. But in shutting down the excess, fire became, in effect, a government monopoly, something so seemingly arcane and technical and intrinsically dangerous that ordinary citizens could not be trusted with its stewardship. In this narrative, restoration means getting people to burn again. What Nachusa adds is the return of the torch to private citizens, not solely to agents of government.

Volunteers make up the heart of the Nachusa's prescribed fire crew.

Prescribed Fire at Nachusa

By John Heneghan

I first came to Nachusa in March of '06 looking for short eared owls and happened to find more than just owls. I learned about the project and thought prairie restoration was a good idea, so I called to inquire about volunteer opportunities. Since I had no practical experience doing restoration, I volunteered to do carpentry projects.

"Live Fire" prescribed fire training exercise – John Heneghan the burn boss feeling the pressure.

John Schmadeke greeted Dave Crites and me on arrival and showed us the barn and facilities. He took us on a tour of some of the units while explaining the role stewards had in prairie restoration. John explained the opportunities available. Neither of us knew much about prairie plants, but we had some familiarity felling trees and some prescribed fire experience. In March of 2007, I found myself back at the barn early on a Saturday to help with a prescribed fire. Bill showed me the fire plan for the day, which included a map of the unit to be burned as well as crew assignments. We were to burn Meiners Wetland. He gave me tasks to perform to get the various trucks and mules (a type of ATV) ready. I was impressed with the friendly nature of the folks there; everyone introduced themselves and asked if I needed anything.

We had a site briefing and then did a tour of the area we would burn. Duane Kitchen was my crew boss and Bernie Buchholz and Jan Grainger were my crewmates. I felt much more at ease than I did on the way to the barn earlier. The next step was the test ignition to check how the vegetation would burn. I began igniting using a drip torch after some tips from Duane. We switched off between driving the truck, doing suppression using the hose from the tank on the truck, and ignition. It was exciting to see the progress of our fire plan work as expected, creating a black line of burned fuel around the burn unit. Soon, we were ready to light the head fire, which with the help of the wind would run towards the downwind black line. It was impressive to see the fire march across the field, culminating in the two fire fronts meeting and canceling each other out as expected.

Majestic oak on Leopold Knob by Ray Silva.

Come March, I look forward to the promise of spring and the beginning of fire season. I have come to enjoy the camaraderie that working on a burn crew creates and enjoy the feeling of satisfaction after a well executed burn. The various units and their respective topography and fuels make each fire different. Mostly, I enjoy seeing the prairie come alive with grasses, wildflowers, birds, and other wildlife that benefit from fire. Please stop by the headquarters barn or call if you want to learn more about prescribed fire and volunteering on the fire crew.

A State Wildlife Incentive Grant is helping Franklin Creek Natural Area produce fire breaks, thin invasive brush, and restore habitat.

Friends Act for Long Term Protection

By Bernie Buchholz

First Friends Meeting January 10th, 2009.

With Success Comes Responsibility

Since 1986 hundreds of Nachusa volunteers have invested thousands of hours and considerable treasure protecting remnants and planting prairie. Although many more years of effort lie ahead, Nachusa is already perhaps the most successful prairie restoration in the USA.

Volunteers believe it is now time to act for the long term protection of these considerable accomplishments. The Friends of Nachusa Grasslands (FRIENDS) was incorporated with protection in mind.

Future is Always Uncertain

As steward John Schmadeke wrote in the 2008 *Prairie Smoke*, "No one can say that what everyone wants to protect vigorously today will be on the high priority list at some future date." According to Bill Kleiman, how to fund stewardship beyond the immediate future is a question facing many conservation projects. And although there are no plans for The Nature Conservancy to divest itself of Nachusa, what might happen to funding 20 or 30 years from now is uncertain.

More pointedly, James Hotchkiss, a long time supporter of Nachusa who passed away in 2008, noted that there are no guarantees about funding for any project. "The one way of making sure Nachusa has a source of income for maintenance is to create an endowment specifically for that purpose."

Endowment Created

FRIENDS decided to take action – again investing in the grasslands, savannas, woodlands, and wetlands we all love.

Creating an endowment dedicated exclusively to Nachusa would provide a substantial portion of the funds for operating the preserve for decades to come. This endowment would eventually reduce The Nature Conservancy's fund-raising burden for the project by helping to annually support stewardship.

Various approaches were considered, but ultimately the FRIENDS worked with the Conservancy to create an Endowment that is dedicated exclusively to the long term stewardship of Nachusa – the Nachusa Grasslands Stewardship Endowment. It is operated by the Conservancy under their professional management and policies.

In addition to funding the endowment, the FRIENDS' mission includes the promotion of volunteerism and the encouragement of science and education at the project. Both objectives will advance the restoration effort and expand the prairie constituency.

FRIENDS was incorporated as a nonprofit 501(3)c in August 2008 and received its federal tax exempt status in December 2009. Membership is now open.

Become a FRIEND go to www.nachusagrasslands.org

Prairie University

By Cody Considine

Why study the prairie? Each year more and more researchers from various curriculums are finding their way to Nachusa. Why? Well, the restoration work over the last 24 years has been recognized by colleagues in the Grasslands Restoration (GRN) as some of the best in the country. The 2007 GRN conservation audit team said "The quality of some of the more recent grassland restorations at the site is as good as it gets." In addition, Nachusa is also leading the way with having completed over 90 restorations! Each of these prairie reconstructions is essentially an experiment, offering scientists an unprecedented opportunity for study.

So what role does Nachusa play in the overall bigger picture of prairie restoration? Some of you may be familiar with a TNC preserve located in the Flint Hills of Kansas called Konza Prairie. Briefly, Konza is a Long Term Ecological Research (LTER) site for the tall grass prairie ecosystem. This location was chosen due to its large size of remnant prairie. For more information log onto their website http://kpbs.konza.ksu.edu/. Konza Prairie has been the setting for thousands of scientific experiments, documented in over 1,200 peer-reviewed publications pertaining to grasslands. However, Konza is almost completely composed of unplowed remnant prairie. In contrast, restoration efforts require different approaches from those used to maintain grassland ecosystems. Considering that 98% of the original tall grass prairie has been destroyed, developing methods to restore this rare ecosystem is of paramount importance. Our vision is that Nachusa will become the Konza for prairie restorations.

Cody & Bill visited Konza Prairie last October.

Some of the recent and current research at Nachusa
See **www.naschusagrasslands.org** for a full listing and report of each completed study.

Ryan Klopf with fellow grad students separating roots to measure below ground productivity.

Ryan Klopf, PhD Candidate Southern Illinois University. I will quantify belowground recovery (i.e., soil structure, carbon and nitrogen dynamics) in two chronosequences of high and low diversity prairie restorations at Nachusa Grasslands and nearby CRP. Community and ecosystem data will be collected to determine whether aboveground biodiversity affects belowground recovery of ecosystem function.

Mike Hansen, MS 2009 Southern Illinois University. The results of this study indicated that some components of ecological fidelity have been successfully restored, while others have not. Using a high-quality seed mix that resembles the species pool of remnant prairie and limiting the abundance of the dominant native warm season grasses and exotic cool season grasses can improve the restoration of plant composition and ecological function in Illinois prairie plantings.

Ben Wodika, PhD Candidate Southern Illinois University. The research I am conducting at Nachusa examines recovery of soil invertebrates. I will examine soil invertebrate succession and determine if plant diversity of a restored field affects the soil invertebrate diversity as well.

Brian Glaves, MS 2009 Northern Illinois University. This study evaluated the density of seed per acre required to produce a successful prairie planting. Based on these results I believe that prairie restoration managers can establish more successful prairie plantings and be more efficient in the amount of seeds that are used.

Courtney Gill, MS candidate Northwestern University. This experiment is designed to look at the effects of predicted climate change and competition on the federally endangered *Lespedeza leptostachya* and the co-occurring *Lespedeza capitata* and *Schizachyrium scoparium*.

Jim Herkert PhD, IDNR Director of Resource Conservation & Jeff Brawn PhD, University of Illinois. The main objective of this study was to estimate grassland and savanna bird nest productivity.

Ann Haverstock, for the last 17 years, Ann has conducted a fixed point count of grassland birds, documenting population changes of grassland birds in a landscape being restored.

Patti Vitt PhD, Chicago Botanical Gardens & Todd Bittner, Cornell University. Investigation of the population dynamics of *Lespedeza leptostachya* (Prairie bush clover) over the last 17 years.

Ron Panzer PhD, North Eastern University, George Derkowitz & Karl Gnaedinger both of TNC. This is part of a large scale study that investigates the diversity of insects among remnant and restored prairies of Illinois

A Nachusa Steward

Anonymous

Do you ever wonder what the Nachusa area looked like before the settlers arrived? Bald eagles probably could have been seen flying overhead searching for food. The meadowlarks and Henslow's sparrows might have been be singing so often that you would think that there was a resident choir. The regal fritillary would have been so numerous on the Hamill-Winter Unit that you could be certain that there was a rich layer of prairie violets. The bobolinks would have been everywhere during the breeding season. Perhaps there was a large colony of Franklin ground squirrels and a sizable flock of greater prairie chickens. You probably would have seen a few bison when you were admiring the prairie smoke on the top of Doug's Knob. There might even have been a pack of wolves. So much has been lost that we may never really know what Nachusa Grasslands looked like.

I am a steward partly because I really would like to know what the area looked like 200 to 300 years ago. I am a steward because we have an opportunity, perhaps the last opportunity, to restore a small part of the tall grass prairie in Illinois to what our best estimate tells us it might have been like. I am out in the summer heat picking prairie coreopsis and cream white indigo because my new planting needs the seed to be complete. My shirt is wet from sweat while picking thimble weed because the area I'm over planting needs more diversity. I'm clearing multi-flora rose and honeysuckle when it is well below freezing because these plants do not belong here, and they will crowd out the native plants. I walk miles during the spring, summer and fall seeking out and pulling or herbiciding other invasives because they will kill the plants that make Nachusa beautiful. I walk my planting weekly pulling nonnative's so that the seed I worked so hard to pick can get established without the damaging competition from nonnative plants which have no natural enemies. I work on the fall and spring burn crews so that the native plants which require fire can thrive and perhaps the nonnative plants will be weakened or destroyed.

Eastern meadowlark by volunteer John Schmadeke.

I am a steward because there is a community of like minded people who are striving to accomplish the same things I am trying to accomplish. These people are friends who will help me with my unit whenever I need help. These people will give me advice if they have been down the road I am trying to traverse.

I am a steward because Nachusa is one of the most beautiful places on Earth. I will never live to see the land restored to its former majesty, but at least I can be a small part of the restoration effort.

Dorothy Wade (1914 - 2010)

By Bill Kleiman

Dorothy, "Dot", Wade passed away this January at age 95. Those of you familiar with Nachusa's beginnings know that Doug and Dot Wade worked hard with a number of people like Tim Keller to bring this landscape to the attention of conservation entities. Conservancy staff knew the Wades and kept hearing about those great prairies, wetlands and woodlands by the Rock River.

Dot was fun, wise, and passionate about prairie. I can remember Dot telling stories of her husband being a graduate student of Aldo Leopold at the University of Wisconsin. Dot would study botany right along with her husband who got the diploma.

She met Frank Lloyd Wright at a party and later built a home that looked to be designed by him. She and Doug interacted with conservationists around the Midwest and started one of the first prairie nurseries in the nation. For decades she hosted meetings and parties at her home near Oregon. For Nachusa, it was Dot and Doug Wade who re-discovered this landscape and led the way to its start. For more information regarding Dot's exciting life visit **www.nachusagrasslands.org**.

A memorial service will be held for Dot at Nachusa on June 13, starting with a potluck lunch at noon.

Volunteer Groups Do Grow

By Sally Baumgardner

New steward Karen Newman and her daughters raking in new seed.

What I hope to do here is to make a comparison by drawing a picture of two effective and vibrant groups of volunteers. Winston Churchill once said, "We make a living by what we get, but we make a life by what we give."

Last Christmas I received a note from a friend (Irene) who volunteered with me 30 years ago in what became the "Volunteers-In-Parks (VIPs)," an experiment of the Hamilton County Park District in southern Ohio.

The Park District needed help from citizens in the activities of their many parks and preserves. By helping with trail maintenance, the VIPs learned the flowers, the trees, the birds. They took children on hikes, then adults, then people with cameras.

Now the VIPs number over 600 people. Some staff the gift shops in visitor centers and host art shows. The outdoor types have been key players in restoring habitat for a variety of wildlife.

Irene writes of the district's seed nursery: "It's really big with a dedicated corps of VIPs who weed, sort, and collect seeds. We are now shipping big packs of prairie seeds to other parks. The stewards have developed a 900 acre wetland. There have been many sightings of birds – even bald eagles. We have come such a long way since we started gathering seeds so long ago up in Dayton."

And then I moved away…to Illinois.

And got involved in another volunteer effort. This one started with "three voices in the wilderness" on sandy land with rare plants and rare grassland birds. Those three (Doug & Dot Wade and Tim Keller) connected with The Nature Conservancy to buy and protect what is now Nachusa Grasslands.

At first, volunteers were few. Some wanted only to hike and see birds and wildflowers. Some were interested in cutting woody plants to keep the wood for home heating. They met each other and learned more and soon realized this project needed human involvement.

Our Project Manager was hired, and more new volunteers came. They are paired up with skilled, experienced people. We grow our own native plants so their seeds can be planted in new parts of the preserve. When prescribed fires were instituted, under the management of the Conservancy, more people came.

One day I wondered if this little band of outdoor types would grow like the Ohio VIPs? So I added up our names at the back of this Prairie Smoke and found over fifty of us. Like compound interest, we ARE growing!

These Stewardship Volunteers and the VIPs share the same feeling: "***The learning never stops.***" Churchill was right: "We make a life by what we give."

Around The Prairie Stewardship Reports

Hamill-Winter Prairie

By Mike Adolph

Bob Brown and I, with help from Ken Reed, Fui Lian and Bob Inger, (and perhaps others we've lost memory of) have been working much of the time to control Red Clover, *Trifoium pratense*, from Hamill-Winter Prairie and its bordering units. There is no consensus on the nature of the threat it poses. Some say that it will give out over time – it is a short-lived perennial. But we fear that it will roll into and onto other areas, taking up more acreage. Then it might give out, but come back in time, perhaps stronger. Our experience is that where it takes hold in Little Bluestem remnants it sometimes forms a solid mass just over ankle-high. This can't be good for diversity. So we have dug and sprayed, as circumstances permit. Sometimes we gather seed heads as well. We've made progress in three years; several acres are clear, and we've made sure it hasn't spread into some new areas.

Dropseed Hills

By Mary Vieregg

Dropseed Hills and the 2008 Dropseed North planting continue to delight, educate, and challenge. The delight comes from seeing the spread of the native species' populations from the higher quality remnant areas into the more degraded areas and from discovering new species like the Prairie gentian blooming in the autumn sunlight. With every year of weed management and burning, the prairie responds with both increased diversity and native population increase.

The education comes from experiencing the delight but also from the more painful recognition that decisions made in the past haven't always been good ones. One example was worrying about the shape of one of the "hills". In a previous era, it had been used as a borrow pit for sand and gravel so it had a misshapen appearance inconsistent with the general area. The decision was made to reshape it using soil that came from a more mesic area. The result has been a pocket of the "hills" with frustrating management issues unique unto itself – different weeds, different needs – surrounded by a collar of dry, sandy remnant. The lesson learned: Think carefully before reshaping the landscape with soils different from the immediately surrounding area.

The challenge comes in trying to defeat weed populations while at the same time finding the time to collect seed for overseeding, and, hopefully, in 2010, for planting additional acreage. Waging war on weeds that flourished during the wet growing season of 2009 captured at least ninety percent of the time spent on the unit. The decision was made early on not to plant new acreage so that this war could be waged with any chance of success. Seed was collected for overseeding both the hills and the 2008 planting (over 142 species) but not nearly in the quantity of previous years.

Spring promises new delights, lessons, and challenges. How will the 2008 planting look in its second year? Will there be a reduction in weeds on the "hills" after the fiercely fought campaign of 2009? Will new species decide to join the Dropseed community? Can't wait to find out.

Doug & Dot Wade Prairie

By Al and Mary Meier

Much of our efforts on the Dot & Doug Wade Prairie in 2009 were again devoted to working on our two most recent plantings; the six-acre 2006 planting and the nearly five-acre 2007 planting.

Although they are located next to each other and planted with very similar seed mixes, the two plantings are surprisingly different. The 2006 planting has a large variety of native plants, but it is also beset with many undesirable species. Canada goldenrod can be found throughout the planting, but we left it alone in the hope that the unwelcome species will gradually disappear. However, we again pulled thousands of Queen Anne's Lace plants in an effort to eliminate this species from the planting. Interestingly, the yarrow problem which we reported upon in last year's Prairie Smoke is almost totally gone, even though we did nothing to manage this species. This leads us to conclude that yarrow is easily outcompeted by native species, if the natives are present in sufficient numbers. In contrast, the 2007 planting is relatively weed-free, with greatly reduced quantities of Canada goldenrod and Queen Anne's Lace.

We cannot definitively explain the reasons for the differences between the two plantings. Is it the difference in time that the two plantings were planted in corn prior to being restored (three versus four years), differences in the hydrology of the two plantings (the 2006 planting is wetter than the 2007 planting), or differences in these two areas' weed problems prior to the time when they were returned to agricultural fields in 2003? We don't know the answer to these questions, but we feel fairly certain that restoration of the remaining twenty acres of the unit that is still in agricultural crops can proceed without fear of the future plantings experiencing extraordinary weed problems.

We have much work remaining on our unit. There are twenty acres in corn that still need to be restored to native prairie as well as continuous maintenance of our existing natural areas. The work is hard, but it is rewarding. The workdays are fun, and we have a great stewardship community at Nachusa. So, come on out and give us a hand picking seeds, pulling weeds, or clearing brush. We can use help year-round restoring the native prairie at Nachusa Grasslands.

Around The Prairie Stewardship Reports

Big Woods

By Hank & Becky Hartman

Water 2009

There were new plants in Big Woods in 2009 and plants that were newly abundant. It's an interesting list: false aster; swamp saxifrage, blue vervain, ditch stonecrop, common water horehound, Losel's twayblade, fringed loosestrife, rice cut grass, sneezeweed, fringed gentian, spring beauty and bulbous cress. Since all but three of these flourished all year in standing water, it's easy to understand that we spent 2009 walking around in rubber boots as we sloshed through the unit.

The twayblade orchid, the fringed gentian and the spring beauty did not originate from seed we planted. They just appeared in unexpected moist locations but not in standing water. In June, Hank spotted a single Losel's twayblade while sweeping for birdsfoot trefoil. The plant was just above an area of standing water. In late August, Becky found fringed gentian in the black oak savanna. We have never deliberately included fringed gentian in our savanna mixes. There were also half a dozen plants on East Knob at a higher drier elevation than the other population!

Other plants were also unhappy with being too wet. The Big Woods populations of flat top aster, culvers root, purple milkweed and sweet Indian plantain all decreased. The purple milkweed plant has been under water for two years so it will be interesting to see if it ever reappears.

Since 2008, there has been water flowing all year south through Shabonna Savanna then into Big Woods at point 18. There were tadpoles at the 2-track crossing towards the fen. Several times we saw a great blue heron hanging out in that area. The wet area in Wade Bottoms, usually goes away by midsummer but was dry for only two or three days of the entire year. The 2010 spring rains will be interesting.

Seed Harvest and Planting Report for 2009

In the world of conservation this is the moment where "the rubber meets the road!" Two gravity flow seeders in tandem planting 22' swaths of 160+ species mix over 50 acres in a recently harvested soy bean field.

Crew Harvest		Volunteers' Harvest
Hand:	2,307 lbs	1,692 lbs
Machine:	~100 lbs	

We unfortunately ran into mechanical failures with both the seed stripper and combine.

Harvest Grand Total for 2009: 4,000 lbs

Harvest amounts include over 200 species.

New Plantings

Crew:	50 acres (record)
Volunteer Stewards:	15 acres
Total:	**65 acres**

Enhanced plantings (overseed)

Crew:	35 acres
Volunteer Stewards:	166 acres
Total:	**201 acres**

Acres seeded in 2009: 266 acres

Seed Harvest Thank You

We would like to especially thank Linda and Terry Ator and Greg Wahl who let us collect prairie seed from their property. Also, Damian Considine deserves special recognition helping locate and collect seed from remnant prairies all over the county. **THANK YOU!**

A beautiful restoration by volunteer Mary Vieregg (2002), lush with diversity, a new home for threatened grassland birds, and a myriad of other species.

The following donations were made to Nachusa Grasslands in the last year. Thank You Donors!

$5,000 and above
Dillon Foundation, M.R. Bauer Foundation

$1,000 and above
Bays English Muffin Corporation, Alan and Mary Rhodes Meier, Ron and Patricia Ingraham, Genesis Nursery in memory of Don Pretzch, Jim and Mary Vieregg, Robert and Joann Fortman, James and Marilyn Anderson, Bob Inger and Tan Fui Lian, Bernie and Cindy Buchholz, Cassie Krueger, Jeff and Joan Meiners, Annette Kleinman

$100 and above
Annette and Thomas Lawson in honor of Russell and James Lawson, Mary Scott, John and Sandra Phillips, John and Cindy Schmadeke, Ralph Frank, State Farm Companies Foundation in recognition of Alan Meier, Ann Haverstock, Jay Stacy, Crest Foods Company Inc., Mary Ann Holzer, Carol Barkhurst in honor of Keith Anderson, Hank and Becky Hartman, Chris and Jennifer Hauser, Bill and Susan Kleiman, Richard Schutter, Jim Hoyt

Other Donors
In memory of Pat Dunlap by Norma Swanson, Carol and Wilbert Boynton, Greg McKeen, Sally and Max Baumgardner, Joyce K. Powers in honor of Nathan Fritz, Joyce Dilling, Theresa Dennis, Ruth Kramer

Nachusa Endowment Fund
Alan and Mary Rhodes Meier, Cindy and John Schmadeke, Todd & Tonya Bittner, Bernard Kleinman

In memory of Dr. Phyllis Orland
David and Anna Marie Froehling, Bunny Holzer and Don Virginia Rocen, John and Kathy Jo Shufflebarger, Kristin and Seth W. Flanders Jr., Jeff and Joan Meiners

In memory of John J. Stukel
Elaine Stukel, Gerald Giovanni, Geraldine Sunden, Mr. and Mrs. Raymond Stukel, Jim and Lynn Huck, Mr. and Mrs. Mel Steffen, Kathy Petrak, Mr. and Mrs. James Marinero, John Neri, Dawn and Randall Lewen, Elk Grove Village, Dale W. Wolter

Fall Crew

Hike Nachusa
During 2010, most hikes are scheduled on Sundays at 2 p.m., 2 hrs long, and are listed in the calendar on page 15. Meet at the Headquarters Barn a few minutes before scheduled hike time. Wear sturdy shoes (not sandals) and long pants. For information: Call Becky Hartman 630-309-2110 or Email bhhartman2001@hotmail.com

Workdays and Hikes for 2010
Volunteer Stewards and Co-stewards lead workdays. New volunteers are always welcome and are encouraged to come learn and work with us. We have workdays every Saturday, starting at 9:00 A.M. Meet at the Preserve Headquarters 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. We also have stewardship during the week, and we can likely team you up with an experienced steward. Give us a call at 815-456-2340 or email cconsidine@tnc.org. Please give it a try; you will be glad you did.

21st Annual Autumn on the Prairie Sept. 18, 2010
Look on the calendar on page 15 for more details.

Stewards of Nachusa Grasslands

Nature Conservancy Staff

Leslee Spraggins, *State Director*
Bill Kleiman, *Project Director*
Cody Considine, *Restoration Ecologist*

Stewards

Big Woods
Hank and Becky Hartman
and Janet Guffy
Co-Stewards: NIU's Committee
for the Preservation of Wildlife
Bennett Savanna
Josh Clark
Clear Creek Prairie
Prairie Preservation Society
of Ogle County
Dot & Doug Wade Prairie
Al & Mary Meier
Dropseed Hills
Mary & Jim Vieregg
Eight Oaks Savanna
Jan Grainger
Fen
Kevin Kaltenbach
Gobbler Ridge at CCK
Bernie & Cindy Buchholz
Jay Stacy
Keith Anderson
Gobbler Bottoms at CCK
Dave Crites & John Heneghan
Co-Stewards: Bob Shone, Bob Brown
Hamill-Winter Prairie
Mike Adolph
Edith and Anna Heinkel Savanna
East Unit
Mike Crowe & Cassie Krueger
West Unit
Jay Stacy
Roadsides
Tom & Jenny Mitchell
Hook Larson
John & Cindy Schmadeke
Rolling Thunder & Harold Walkup Prairies
Sally Baumgardner
Co-Stewards: George Bouska, Lorraine Gawlik, Max Baumgardner, Earl Thomas
Sand Farm
Russ Brunner
Sandstone Bluffs at Tellabs
Jan Grainger
Tellabs Savanna West Wetlands
Ron Ingraham
Thelma Carpenter Prairie
Tom & Jenny Mitchell
Kitten Tail Unit
West Chicago Prairie Stewards
Open Units
Prairie Potholes, Schafer Prairie, Coneflower, Barn Steward, Tellabs West Savanna, Tellabs East Savanna.
Other Stewards
David Edelbach, Ray Derksen, Karen Newman, Ron Cress

Autumn On The Prairie 2010

Chair: Janet Guffy
Co-chair: Cassie Krueger

Science Stewards: *inquire for more details* **Open**
Bird Monitoring: Ann Haverstock
Butterfly Monitoring: Jan Grainger
Herbarium Steward: Dwight Heckert
Insect Collector: Open
Lespedeza leptostachya Monitor: Open
Photo Monitors: Charles & Emmy Lou Larry
Education Coordinator: Ron Cress
Publicist/Liaison/Presenters: Hank & Becky Hartman, Sally Baumgardner, Dwight Heckert
Youth Stewards Leaders: Mike Adolph, Sally Baumgardner, Susan Kleiman, Ron Ingraham, Bob Shone, Barb Rutherford, George Bouska, Bernie Buchholz.

2009 Seasonal Assistant Stewards

Summer Crew

Brian Glaves
Mike Quadrozi
Brian Dugan
Samantha Lindquist
Shawna Anderson
Katy Cummings
Amber Singer

Fall Crew

Brian Glaves
Mike Quadrozi
Brian Dugan
Mike Saxton
Chris Sonnier

Youth Stewards Program: 4th grade students from Franklin Grove getting ready to explore the prairie.

Calendar of Events, Workdays, and Hikes 2010-2011

Clip-N-Save

March – Brush and Fire Season
6 Gobbler Ridge
13 Annual Fire Refresher for Nachusa Crew
20 Tellabs Savanna
21 HIKE Sunday 2 P.M. Bennett Savanna
27 East Heinkel Savanna

April – Brush and Fire Season
3 Big Woods
10 Hamill-Winter Prairie
17 The Fen
24 Tellabs-West Wetlands
25 HIKE Sunday 2 P.M. Lowden Rd. to Coyote Point through The Potholes Unit

May – Weed Season
1 Hook Larson Prairie
8 Big Woods
15 Eight Oaks
16 Photography HIKE Sunday 2 P.M. -Violets
22 Fame Flower
23 HIKE 2 P.M. Wade Creek wading expedition. Get up close and personal with the wetlands
29 West Heinkel Savanna

June – Weed and Seed Season
5 Dot & Doug Wade Prairie
12 Hook Larson Prairie
13 Photography HIKE Sunday 12 P.M. – Coneflowers
19 Thelma Carpenter Prairie
20 HIKE Sunday 2 P.M. Johnny's Creek to the high East Heinkel. Great views of the south wetland from the top of the rocks.
26 Fame Flower
1st Annual Friends of Nachusa Grasslands Party

July – Weeds and Seeds
3 Dot & Doug Wade Prairie
10 Hamill-Winter Prairie
17 Big Woods
FRIENDS of NACHUSA GRASSLANDS Annual Meeting 1 P.M.
18 HIKE Sunday 2 P.M. Franklin Creek at Meiners Wetland
24 Gobbler Ridge West
31 Rolling Thunder

August – Seeds
7 Dot & Doug Wade Prairie
14 Tellabs Savanna West Wetlands
21 Big Woods
22 HIKE Sunday 2 P.M. Clear Creek Knolls and Beaver Pond Wetlands
28 Gobbler Ridge West

September – Seeds
4 The Fen
11 Dot & Doug Wade Prairie
12 Photography HIKE 2 P.M. – Gentians
18 **21st Annual Autumn on The Prairie Celebration**
10 A.M. to 5 P.M. Wild walks, different expert leaders, hikes leaving every 20 minutes all day, children's tent, food, and music
25 Gobbler Ridge West

October – Seeds
2 Big Woods
9 Fame Flower
10 Sunday – Bennett Savanna
HIKE 2 P.M. Introduction to Seed Collecting on the Prairie. Help collect and learn what it takes to plant a prairie.
15 Open House for Research Ecologists
16 Dot & Doug Wade Prairie
23 Gobbler Ridge West
30 Rolling Thunder Prairie

November – Brush, Planting, and Fire Season
6 Big Woods
12 P.M. 2010 Seed Harvest Celebration Potluck
2 P.M. Preserve Tour by Bill Kleiman
13 The Fen
20 East Heinkel Savanna
27 Rolling Thunder Prairie

December – Brush and Planting Season
4 Dot & Doug Wade Prairie
5 Sunday – Bennet Savanna
HIKE Sunday 2 P.M. Hamill Winter Prairie Ridge
11 Eight Oaks
18 Big Woods

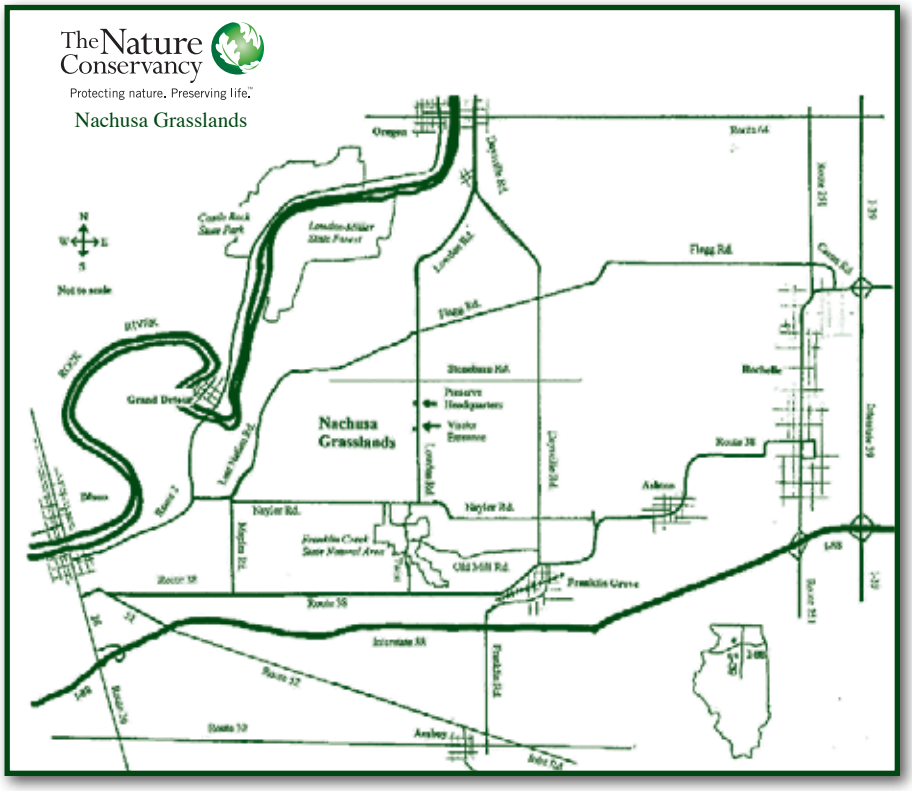
January 2011 – Brush Season
1 Gobbler Bottoms
8 East Heinkel Savanna
15 Tellabs Savanna-West Wetlands
22 Big Woods
29 Hook Larson Prairie

February 2011 – Brush Season
5 Gobbler Bottoms
12 Big Woods
19 Bennett Savanna
26 Dot & Doug Wade Prairie

March 2011 – Brush and Fire Season
5 Eight Oaks
12 Gobbler Bottoms
19 Tellabs-West Wetlands
26 East Heinkel

Reaching Nachusa Grasslands • www.NachusaGrasslands.org

Nachusa 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 ½ mile north of Visitor Entrance) at 8772 S. Lowden Rd. 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 parking entrance and kiosk on the left (west).

From Route 64:
Just east of the Rock River in Oregon, turn south on Daysville Rd. (towards Lowden-Miller State Forest). Travel approx. 2.4 miles to Lowden Rd., turn right (angle) still following State Forest sign. Travel south approx. 5.3 miles (past State Forest) to a 4-way stop at Flagg Rd. Continue south another 2 miles, the Preserve entrance is on the right (west).

From Dixon:

Option 1: Take Rt. 38 East into Franklin Grove then turn left (north) on Daysville Rd. Travel 1.5 miles north to Naylor Rd., turn left (west) and go 2.2 miles to Lowden Rd., turn right (north) and go 1 mile to Preserve entrance on the left (west).

Option 2: Take Rt. 2 North (approx. 2.3 miles from Rt. 26/Galena Ave.), turn right (east) on Lost Nation Rd. Go one mile to Maples Rd., turn right, then left immediately onto Naylor Rd. Go east for 3.5 miles to Lowden Rd. Turn left (north) and go one mile to Preserve entrance on left (west).

Nachusa Grasslands is owned and operated by The Nature Conservancy, a private, non-profit group whose mission is to preserve the 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
Protecting nature. Preserving life.™

The Nature Conservancy
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