The work of volunteers is essential to the success of the restoration of Nachusa Grasslands. Over the summer many people have been very busy working on a variety of projects.

Chris Bronny and two of his former students, Jason Bates and Eric Wood, have built a bridge across Wade Creek facilitating passage through the wetlands. The ridge is constructed of logs of red pine fastened with rope. Volunteers have also cut a trail through the wetland area; we hope this will encourage visitors to explore this fascinating ecosystem with its many birds and unique plants.

Led by Mel Hoff, a group of volunteers from the West Chicago Prairie Stewardship Group have cut through the denser, brushier areas near the wetlands with brushwhacker and sicklebar mower.

Isabel Johnston continues to battle "those hardy invaders" on Dot's Knob. She and Jack Keegan have applied the herbicide 'Spike' to control resprouting. Last summer Isabel spent many long hours in the hot sun cutting multifloras and has been quite distressed to see their re-emergence. We'll compare the treated and untreated areas to determine the effectiveness of this herbicide on multifloras.

This summer many new volunteers have experienced the pleasure of cutting multifloras, working in the southern part of the preserve. These giants provide considerable shade, making it difficult for prairie plants to colonize the area. By cutting these down to size we will aid in the advancement of the little bluestem and other desirable prairie species.
A lot of effort has been directed toward restoring the rare savanna ecosystem at Nachusa. Through decades of fire suppression and grazing the savanna has become overrun by woody invaders and a weedy understory. This summer work crews have either girdled or cut all undesirable trees. This will eventually open up the canopy, allowing oak seedlings and a savanna mix of grasses and forbs to become established. Bottlebrush grass, Virginia wildrye and Smooth Solomon's Seal are a few of the species which have been planted this year. done by groups of scouts from nearby Camp Lowden. Each Wednesday for five weeks a group from the camp worked on restoration projects at Nachusa, gaining credit toward their conservation merit badges. In addition to girdling, they cut sumac and multiflora rose. The enthusiasm and good humor of leaders Jamie Pennington and Dan Reilly made these trips educational and fun for all of us.

The two westernmost knobs of the preserve are receiving special attention this year. They have been "adopted" by two volunteers from the Chicago suburbs who must love a challenge. Julie Rocco and Chris McCauley have chosen this area of sheep sorrel and multiflora rose as their mini-restoration project. Through their efforts we'll soon see a revival of the prairie in this pampered spot.

The deep bluish-purple flowers of the Downy Gentian can be found at Nachusa Grasslands. It is one of the few Autumn flowers that can survive in the shade of the tall grasses.

DOWNY GENTIAN
(Gentiana puberulenta)
Lennie Ashford

INFORMATION NEEDED

___ I wish to continue receiving PRAIRIE SMOKE. (We are in the process of finalizing our mailing list. We need your response to insure we have your correct address and you wish to stay on the list.)

___ I would like to receive a copy of the VISITOR'S GUIDE to the Nachusa Grasslands. The GUIDE will be available at the Grasslands once an appropriate container is installed.

___ I am willing to help on: seed collecting, burning, ecological studies, brush cutting, education/promotion, newsletter, fund raising, or other efforts at Nachusa (specify). (Please circle your particular interests or comment below.)

NAME ____________________________

ADDRESS __________________________

CITY __________________________ STATE ________

ZIP ________ PHONE (____) ________

PLEASE PROVIDE THE INFORMATION NEEDED AND RETURN TO: THE NATURE CONSERVANCY, ILLINOIS FIELD OFFICE, 79 WEST MONROE, CHICAGO, IL 60603.
HOPES AND PLANS

by STEVE PACKARD

I’ve heard it said that Nachusa Grasslands is the most important project the Conservancy has ever done in Illinois. It is certainly the largest of our preserves as well as our most ambitious management challenge. Yet its future, and how important it will become, are not as easy to predict. Let me start by outlining what we know or expect in the near term.

Of the 610 acres in the existing reserve, about 50 acres are woodland (former savanna), 40 acres are marsh or fen, 20 acres are high quality prairie, 150 acres are degraded prairie which are gradually recovering from intensive grazing, and 350 acres are croplands in wheat, corn, soybeans, or set-aside programs. Of the 350 acres of cropland about 50 acres have been replanted to prairie species.

Nachusa’s woodlands once had a grassy and flowery prairie-like understory. They too have been degraded by heavy grazing and need some replanting and many years of controlled burning to regain their natural richness. Very limited savanna restoration planting was begun in 1988.

The long term security of this preserve would be very much improved by some additional acquisitions. The best quality savanna, the best quality marsh, and a piece of high quality prairie with the endangered woolly milkweed - all these are still on private land adjacent to the preserve. Adding a few hundred additional acres to the core preserve habitat would be a great benefit to many of the key wildlife species. And acquiring a "corridor" of land to link this preserve to Franklin Creek State Park would also be a big plus.

We have approached some adjoining landowners and told them that we would be interested in buying nearby land at a fair price from owners who want to sell. That leaves two issues left to discuss. The first one is: how will we get the money to pay the bills? The second is: how will we restore and manage this preserve over the long haul?

The answer to both questions is a shock to some people. The Conservancy depends on voluntary contributions from individuals for the bulk of its funding. And we also depend on the work of volunteers to accomplish the bulk of our preserve management. We believe this large project was so important that we could find a way to pay the bills. If you can make a small contribution, or if you can afford to make a substantial one, please do. If you know of anyone we should approach for a major contribution, please let us know that too.

Hundreds of people are Illinois Conservancy volunteers on dozens of preserves. We could never hope to hire staff to do all the work they do. And, because so much restoration is necessary, Nachusa Grasslands needs more management work than any other of our preserves. We wouldn’t even attempt to assemble a preserve like this if it weren’t for the dedication and personal generosity of people like Chris Bronny, Isabel Johnston, Tim Keller, Dennis Lubbs, Ellen Baker, Robert Betz and Hazel Reuter and many others.

Even so we need stewardship funds. Fencing has cost us a few hundred dollars so far. We hired Rich Welch to combine prairie seed for the restoration. We hired Ron Panzer to study our rare small animals and make professional management recommendations. A $10,000 donation earmarked for stewardship paid for these and similar important things.

CON’T. PAGE 4
And the future? If contributions and volunteer work can sustain it, we hope to do the following: 1. Buy more land. Connect the preserve with Franklin Creek State Park so the animals of both places can benefit from the increased habitat. 2. Restore 50 to 100 acres of cropland each year, weather permitting. 3. Publish a newsletter. 4. Prepare a map and trail guide for visitors. 5. Remove all existing fences within the preserve. 6. Plug or dismantle the tile system to restore the water table and wetlands within the preserve. 7. Restore all the plant species that were likely to have been here prior to plowing and grazing. 8. Reintroduce a small herd of buffalo and possibly elk, to major parts of the preserve. 9. Reintroduce certain small animals as determined by appropriate research (for example: Franklin's ground squirrel, hog-nosed snake, broad-winged skipper).

The restoration of missing species is probably what we are asked about the most. It is one of the most important features of the long term vision of what Nachusa Grasslands is all about.

There are more than one hundred prairie preserves in Illinois. Most are so small that ecologists believe they will gradually lose many species over the decades and centuries. Few preserves are large enough to support even a single breeding pair of prairie birds. Prairies of less than 100 acres are expected to lose many of their butterflies and other invertebrate species. No Illinois prairie has felt the tread of buffalo for over one hundred years. Prairie chickens do not survive on any Illinois prairie. Yet many of the rare plants at Nachusa are thought to depend on disturbance such as the wandering buffalo herds caused. I say "thought to depend" because no one really knows. The eastern tallgrass prairie was gone as a functioning ecosystem before the science of ecology was born. No one has ever studied it. How much the long-term survival of some species depend on others, no one can say for sure. But we know enough to be confident that it makes a lot of sense for conservationists to try to rebuild at least one eastern tallgrass prairie as complete and intact as possible.

None of us alive today will ever see a fully restored Nachusa Grasslands in the robust glory of ecological health. Many of its lessons will only be learned by our descendants. But we who have the opportunity to work on it have an extraordinary privilege. We can witness and participate in the beginning of something awesome and wonderful, the rebirth of a massive, complex grassland landscape.

Chris Bronny ’88

**CONTACT PEOPLE**

**NEWSLETTER:** JULIE ROCCO  
312/960-2873

**BURNING:** MIKE CROWE  
815/393-4572

**BRUSH CONTROL:** ED PLESKOVITCH  
815/626-8092

If you are interested in any of these area of work at Nachusa Grasslands please call these CONTACT PEOPLE and get the latest information available.
PRAIRIE'S PROGRESS

By Chris Brony

This has been an exciting summer for me out at Nachusa Grasslands. I not only learned some new plants, but some exciting discoveries were made.

From a restoration standpoint, one of the most satisfying things accomplished was the reintro-duction of species (by seed) that should be thriving out at the Grasslands, but are presently missing. With luck, in a few years we will be seeing the homecoming of Indian paintbrush (Castilleja coccinea), glade mallow (Napaea dioica), golden alexanders (Zizia aurea), swamp saxifrage (Saxifraga pensylvanica), veiny pea (Lathyrus venosus) and northern bedstraw (Galium boreale).

Blue-joint grass (Calamagrostis canadensis) and fowl manna grass (Glyceria striata) were found in an isolated wet meadow in the western portion of the preserve. Healthy populations of sweet-scented Indian plantain (Cacalia sueveolens) and sensitive fern (Onoclea sensibilis) were observed in a sedge meadow in the northwest corner.

The prairie is beginning to show itself in the area seeded in 1987. Stiff goldenrod (Solidago rigidia) is coming up in impressive numbers. Canada wild-rye (Elymus canadensis) has already flowered and is setting seed. Gray goldenrod (Solidago nemoralis) and flowering spurge (Euphorbia corollata) are moving in on the perimeters of the seeded areas from the nearby high quality knobs.

Since the return of the rains throughout July and August the whole preserve has really perked up. The stands of little bluestem (Andropogon scoparius) around the base of the knobs look great, and should be a gorgeous maroon-orange in October. Rough blazingstar (Liatris aspera) is thick this year, and will be a treat to see in September. Autumn is a fantastic season on the prairie. Try to get out for a visit!

THOSE INCREDIBLE MONARCHS

By Carol Jackley

On my last two outings to count butterflies at Nachusa Grasslands during August, I counted upwards to 87 monarch butterflies in a 10' section on both sides of me for over a mile. Some were in bad color and could barely fly, I knew they would not make the migration. Others were mating as they flew through the air getting ready for their last brood.

I wondered about their life cycle with some dying and others mating. I came home and read about this most interesting butterfly.

According to my information, this species is in the family of Milkweed Butterflies with only four kinds in North America. The Monarch is the only one in our area. The male has one dot on each of it’s hind wings that are sex pouches and brush-like hair pencils within the abdomen. In courtship, the males extend these brushes, releasing scents that subdue the female during mating.

Monarchs in April - June are seen in the south, have broods and migrate northward. During July - August they are residents here and have broods. In September - October the individuals we see are migrating southward.

The Monarch is the only butterfly that migrates on a regular basis but no single individual makes the entire round-trip journey. In the fall the
Fall Seed Collecting Schedule

Seed collecting trips will begin at 9:00 am and run until noon. Please be prompt. Seeds can not be collected when wet, so if it has rained, trip may be postponed. Call trip leader.

Saturday, Sept. 23 9:00 am  
Trip leader: Hazel Reuter. Meet at Hazel’s house, 897 Union Rd. (south of Dixon on Route 26 corner of 26 and Union). Phone 815/376-5834.

Sunday, October 1 9:00 am  
Trip leader: Dennis Lubbs. Call Dennis at 815/379-9060 for location.

Saturday, October 7 9:00 am  
Trip leader: Julie Rocco. Meet at Nachusa Grasslands sign on Lowden Rd. Phone 312/980-2873 for details.

Sunday, October 15 9:00 am  
Trip leader: Esther Schippers. Meet at intersection of Illinois Routes 26 and 30, at the northeast corner. Phone 815/562-3470 for details.

Saturday, October 21 9:00 am  
Trip leader: Mike Crowe. Call Mike at 815/393-4572 for location.

Saturday, October 28 9:00 am  

Sunday, October 29 9:00 am  
Trip leader: Chris Bronny. Same as above.

Saturday, November 4 9:00 am  
Trip leaders: Don and Dennis Nelson. Meet in Amboy at the USDA Service Center on the south edge of town on Hwy 52. Phone Don at 309/791-0194 or Dennis at 815/672-0396 for details.
Ecological studies play a very important role in the restoration of Nachusa Grasslands. In order to restore the natural balance, we must first understand how human interference has upset that balance. This process begins by conducting inventories of the plant and animal communities present. Ron Panzer, from Northeastern Illinois University, has conducted a preliminary study of the insect populations at Nachusa. As part of the ongoing work of this study, Carol Jackley and Rita Babin are monitoring butterflies along a "butterfly census route.

Ron has found the area to be lacking in several insect species which are characteristic of habitats similar to Nachusa. He has thus re-introduced froghoppers, lesser fritillaries and other species which should be present.

In another study, Vicki Nuzzo and Marlin Bowles are examining several populations of the rare Hill's thistle (Cirsium hillii), an endangered plant in Illinois.

People with non-science backgrounds can take part in ecological studies too. Mary Adams had heard The Nature Conservancy was looking for volunteers to conduct plant population studies at Nachusa. With a little guidance from a staff member she is now monitoring populations of kitten tails (Besseya bullii) and fame flower (Talinum rugospermum).

SEED COLLECTING TIPS

1. Be sure to obtain permission before collecting seed.

2. Always be careful not to damage the area in any way when collecting seed.

3. Study the plant whose seeds you plan to collect so you can recognize it when gone to seed.

4. Collect seed at the right time so they will come off easily. Never collect seed in the rain.

5. Never mix seeds together.

6. Always label your collections accurately. Record -- species, date, and where collected.

7. The best thing to collect seeds in is a paper bag. Envelopes work well also.

THOSE INCREDIBLE MONARCHS

Midwestern Monarchs begin to congregate and continue south all the way to middle Mexico, where they spend the winter among fir forests at high altitudes. Winter butterflies are sluggish and do not reproduce; they venture out to take nectar on warm days. Both Mexican and international efforts are underway to protect the millions of Monarchs that come to Mexico. In California, nearly all the roosting sites face threatening development.

The northward migration in spring is less noticeable. The adults head north, breed along the way, generally in the southern states, lay eggs, and die. Their offspring then fly north and breed in turn, reaching as far north as Canada.

I hope this has helped the readers understand these insects and now know why I used the title, "Those Incredible Monarchs".
THANK YOU!

Thanks to all the volunteers who worked at Nachusa this summer! In addition to those already mentioned, these folks also donated their effort toward this very important project.

Mike Adolph
Mike Crowe
Jim Cooperman
Wallace Cox
Tom DeBates
Lee Hanson
Tim Keller
Jay Lomack
Bob and Tony Neff
Dennis and Don Nelson
Dean O'Neil
Ed Pleskovitch
Ben and Marilyn Rasmussen
Esther Schippers
John Sosulski
Richard Tarter
Jake Vail
Randy West
And all others whose names we weren't able to secure, THANK YOU!

READER'S CORNER

Some random comments from our readers -- "I'm real happy to see there will be a map for visitors." J. Kusner, Park Ridge, IL -- "I enjoyed every word ('Prairie Smoke') and only wish that I had rec'd #1." G. Hartman, Rochelle, IL -- KEEP THOSE COMMENTS COMING! Pass along any suggestions for any phase of the Nachusa Grasslands project or items you would like to see in "Prairie Smoke". Remember this is your newsletter.

THE NACHUSA GRASSLANDS NEWSLETTER IS BROUGHT TO YOU BY THE NATURE CONSERVANCY, ILLINOIS FIELD OFFICE, 79 WEST MONROE, CHICAGO, IL 60603 -- PHONE 312/346-8166

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