

FCNA News

Volume 1, Number 3, Fall 2002

Friends of the Campus Natural Areas

Dedicated to the Preservation and Stewardship of our Woodlands, Wetlands, Prairies and Shorelines

Managing Urban Natural Areas

by Stanley Temple

Stanley A. Temple, Beers-Bascom Professor in Conservation in the Department of Wildlife Ecology and a Professor of Environmental Studies, gave a well-received presentation at the Friends of the CNA annual meeting on April 23, 2002. Below is an abstract of Stanley Temple's address. A more complete version of this talk can be found on the FCNA Web Site.

There is an ancient curse: "May you be responsible for an urban natural area." Managing patches of underdeveloped land imbedded in a built-up, densely populated matrix is difficult. Challenges derive from the complex ecological and social issues involved and the perceived arbitrariness of key management decisions.

Urban natural areas (UNA) tend to deteriorate toward "unnatural" states, requiring considerable human effort to make them more "natural." But UNA can never be truly natural, if being natural means largely uninfluenced by humans. So managers must define a vision of "naturalness" for their area and this decision is somewhat arbitrary. Naturalness is a gradient. An UNA can appropriately fall anywhere from largely natural to largely unnatural. This gradient is defined by features such as the ratio of exotic to native species, the sustainability of ecological processes, and the amount of human effort required to maintain the desired conditions.

Choosing the appropriate level of naturalness is often contentious. UNA exist primarily to serve people who care about them. Without their support, the very existence of an UNA can be threatened and labor-intensive management can become impossible. Managers must understand the complex attitudes people have toward nature (including UNA). One study of attitudes toward nature identified the following categories:

- A "Utilitarian" attitude focuses on the use of nature (bikers, boaters, and gardeners who use the CNA).
- A "Naturalistic" attitude focuses on the satisfaction obtained from direct experience with nature (birders, walkers, and joggers who enjoy the CNA).
- An "Aesthetic" attitude focuses on the beauty of nature (many walkers and the lunchtime crowd on a spring day).
- A "Humanistic" attitude focuses on an emotional attachment to a place (members of the FCNA).
- "Ecologistic and Scientistic" attitudes focus on scientific study to understand nature (researchers and students who study in the CNA).
- A "Moralistic" attitude focuses on the ethical appropriateness of activities (some opposition to tree cutting, removal of exotics, use of herbicides in the CNA).
- A "Dominionistic" attitude focuses on controlling natural forces (engineering solutions to run-off, water control, and surface of the Lakeshore Path).
- A "Negativistic" attitude focuses on fear and aversion of nature (individuals who actively avoid walking through the CNA).
- A "Neutralistic" attitude is characterized by a disinterest in nature (those who don't even know the CNA exist and wouldn't care even if they knew).

Our CNA need a thoughtful and explicit vision of naturalness that is ecologically practical and socially appropriate. Attitudes of people who care about the CNA need to be understood beyond simply assigning them to "user groups." The CNA ought to be a place where Aldo Leopold's "Land Ethic" is applied and potential activities are tested against his standard: "A thing is right when it tends to preserve the integrity, stability and beauty of the biotic community."

Friends of the Campus Natural Areas

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Friends of the CNA

is a 501(c)(3) non-profit organization

Field Trips and Workshops

Additional Field Trips will be posted on the FCNA Web Site: www.uwalumni.com/fcna

Biocore Prairie Tour

August 24 (Saturday) 10 -11 A.M.

UW- Madison Biocore staff and students have been attempting since 1998 to turn part of the old agricultural field north and east of the Eagle Heights Gardens into tallgrass prairie. Weeds and agricultural grasses have been putting seeds into the soil for over 30 years, and establishing prairie on this site has proved to be more of a challenge than anyone anticipated. Come and see this work in progress, including a very successful demonstration garden at the top of the hill, and hear about what we have learned.

Leaders: Ann Burgess (271-9335) and Curt Caslavka Location: Big metal gate at the entrance to Picnic Point

Fall Birding at Picnic Point

September 7 (Saturday) 8-10 A.M. (with the possibility of extending) Join us in a search for fall migrants including confusing fall warblers and sparrows. Co-sponsored by Madison Audubon Society.

Leader: Jill Feldkamp and Roma Lenehan (238-5406).

Location: 1918 Marsh Parking Lot (across from Pienic Point)

EthnoBotany: Uses of Plants in the CNA

September 8 (Sunday) 2-4 P.M.

Taste wild foods, make twine from natural fibers, and learn about the many uses of common (and not so common) wild plants.

Leader: David Eagan (249-0409) Location: Picnic Point Entrance

Madison Audubon Field Trips to the CNA

(For specifics (time and place) about Audubon Trips, call 255-2476 or check *The Audubon Caws* or their Web Site: www.madisonaudubon.org)

Bird Banding at Picnic Point

September 14 (Saturday) 8 A.M.

The Biocore Prairie Bird Banding Station is in its second year of operation. Mara will show you how birds are banded and relate how important information is gathered for management and conservation purposes. The nets will be up until noon. People can leave when they wish.

Leader: Mara McDonald (274-2534)

Location: Picnic Point Entrance or Biocore Prairie

Woodland Migration Corridors: Critical Stopover Habitat for Neotropical Migrant Forest Birds

by Glenda Denniston

Neotropical Migrants in Trouble

The woodlands of the Campus Natural Areas (CNA) are part of a migration route important to the survival of forest-interior Neotropical migrants. These birds travel twice-yearly between winter homes in the tropics and summer breeding sites in the north. The populations of many of these species (which include thrushes, tanagers, cuckoos, flycatchers, warblers, orioles and other songbirds as well as some predators) are steadily decreasing.

Why is this happening, and what can be done to change this ominous trend? Scientists have focused on habitat deterioration in three critical areas: the winter tropical forests, the summer breeding grounds in the north, and the migration corridors connecting these two. There are problems in each of these, but only those of the migration and breeding periods are applicable to the woodlands of the CNA.

Importance of Woodland Habitat for Migrants

A major problem in migration is the loss of woodland habitat. Birds use a tremendous amount of energy in their astounding voyages and need to replenish their fat supply many times along their route. Today they are dependent on forest "corridors" which have many gaps and are more like archipelagos of disconnected wooded islands than true migration highways. Further, many of these forested "islands" have deteriorated in ways that make them much less able to offer the food and shelter needed by the migrants.

The CNA serves as an important migrant resting area due to its location on the south edge of a large lake. In the spring birds come to the lake edge and travel down Picnic Point in an attempt to avoid flying over a large body of water. In periods of strong north winds and/or rain, birds may be forced to remain in the area for several days. The presence of two and a half miles of wooded shore in the CNA allows birds to move freely to avoid the chilling winds and to find the best feeding areas. In the fall, exhausted from a long night of flying which ends with a dangerous flight over the lake, birds land at Frautschi Point and along the wooded shore. They spend one or more days (depending on weather and their fat reserves) refueling and regaining weight. To these forest birds, the CNA represents a wooded

oasis in a relatively barren urban and agricultural landscape.

Forest Degradation

Simplification makes forest less useful for migrants. Many forests have lost their native plant diversity and their multilevel structure, particularly the layers of understory trees, shrubs, and ground vegetation and the vines that connect these layers. With this decreased plant diversity and simplified forest structure, woodlands have far fewer niches for birds. As a general rule, the more vegetation layers and the greater the native plant diversity, the more niches for wildlife.

The "Edge Effect"

The sprawl of man-dominated landscapes, timber cutting, grazing, and road construction have broken our forests into smaller and smaller units, often separated from each other by some distance. This not only decreases the actual amount of forest available to wildlife, but changes its quality as well. Many birds need interior forest rather than edge, in the breeding season and during migration. They need the seclusion, the food provided, and the relative safety from predators. Most predators are edge-adapted and many hunt most successfully where there are gaps in the forest canopy and few shrubby places to hide. Biologists have found that "interior forest" begins about 300 feet from any road or other non-wooded area. In a very small woodlot, the entire woodlot is edge.

What Can We Do?

What can we do in the CNA and in our neighborhoods to provide optimum habitat for the Neotropical forest birds that migrate through our area?

- 1) Prevent further fragmentation of woodland areas.
- 2) Fill the gaps between woodlots by reforesting damaged areas between them. Where this is impossible, connect the woodlots with hedgerows of native trees and shrubs, especially berry- and seed-producing ones.
- 3) To the extent possible, locate roads and trails on the peripheries of the woodlands instead of through the interior and allow roadside vegetation to grow to at least six inches tall.
- 4) Aim for the maximum plant diversity and the maximum complexity of forest structure.
- 5) Make our properties wildlife-friendly and encourage others in the community to do the same.

Thank You Volunteers

The Friends of the CNA and the Campus Natural Areas Manager want to thank all the volunteers that did field work and helped organize the Friends of the CNA. These volunteers made our first year a success.

Field Volunteers

Outdoor volunteers removed alien invasive species including garlic mustard and buckthorn. They planted, weeded, and watered plants at the Friends of the CNA Picnic Point Entrance Project and at the Upper Bill's Woods Planting Project. They worked on the Bird Project and cleaned up trash. They mapped vegetation.

Darin Burleigh Jane Camerini Cheri Carbon Curt Caslavka Glenda Denniston Dan Doeppers Dick Dwelle Kathi Dwelle David Eagan Marty Evanson Nancy Griswold Tom Helgeson Trudy Karlson Roma Lenehan Marian Morgan David Musolf Harriet Riley Wilma Ross Andy Schroeder Susan Slapnick Mary Trewartha Tom Wise

Peg Wallace
Teaching Assistant Juniper Garver
& her IES 112 students

Kathleen Arrington and the Eagle Heights Gardeners

Graduate student Cynthia Harrington & the University Houses Gardeners Students Paula Hartman.

Sarah Hong, Rachel Kutil, Rachel Licker, Beth Rollman, Jamie Smith Field Trip Leaders

Rebecca Christoffel Jill Feldkamp Roma Lenehan John Thomson Andrew Williams

Organizational Volunteers

The people who served on the Friends of the CNA Board and Committees made our organization possible. Others worked on the Newsletter and the Web Site

Tom Brock Jane Camerini Glenda Denniston Dan Doeppers Jill Feldkamp Robert M. Goodman Henry Hart Tom Helgeson Roma Lenehan William Mann Blair Mathews Richard W. McCov Jean Meanwell William Muehl Sylvia Peterson Tad Pinkerton Harriet Riley Susan Slapnick Mary Trewartha Dan Wallace

Thank You Special Donors

Thank you to Dorothy Gertsch and Dale Beske, Kathy Brock, Curt Caslavka, and Dick and Kathi Dwelle for their generous donations of native plants to our planting projects.

Thank you to Fiskars for their generous donation of tools including loppers and saws.

Announcements

CNA Master Planning

The CNA Committee is continuing to work on a comprehensive plan for the CNA. Eventually public meetings will be held to allow people to voice their opinions on this important long-term plan.

Lakeshore Path Construction

The UW Campus will be reconstructing the Lakeshore Path. Along University Bay from the Willow Creek bridge to Picnic Point the path will be raised to prevent future flooding. In places the path will be narrowed. Improvements will be made to handle storm water runoff. Some new plants will be planted between the path and the lake. The path will not be paved, nor will new lighting be put in.

Correction

We regret that we misspelled Joshua Sulman's name in the "Eagle Heights Woods" article in the Spring 2002 FCNA News.

Rhino Unearthed

In May a UW Zoological Museum team led by Curator Emeritus John Dallman dug up an almost intact white rhinoceros from the CNA. The rhinoceros died in 1985 at the Milwaukee County Zoo. It had been buried 8 feet deep in the CNA for the meat to be cleaned off the bones by the natural processes. Unfortunately for the excavation team, most of the flesh remained on the rhino when they dug it up. The team had to butcher this 17 year old carcass. The cleaned bones will be part of the Zoology Museum collection. One of the team members said the lesson was "Don't bury things so deep."

New Members

Patron

Carin Clauss
David R. Cross
Anne W. Herb
Margaret Jones
Kenneth W. Potter
Sarita F. Trewartha

Steward

Amy Kinast and Darin Burleigh Julie DeWitt Dan Doeppers Betty and Will Fey Annetta Rosser Levi Wood

Household

Liz Cooper
Burton J. and Dale M. Kushner
Linda Schuler and David Liebl
Richard and Lorraine Ranney
Carol and Michael Shrank
Glenn and Cleo Sonnedecker
Steve and Nina Toutant

Individual

Eleaner L. Blakely Mike Block Ruth Cadoret David Eagan R.B. Fowler Thomas Kozlovsky Mara McDonald Patricia Meagher-Springer Ursula Petersen Ken Ragland Jean Rideout Gary Rubin Joan B. Rundle Andy Schroeder Stanley Temple Virginia A. Waddick John Young Paul H. Zedler

Student

Jennifer Erickson Dana Freiburger

Generous Donor Matches Membership Donations

A very generous anonymous donor has matched each individual membership donation up to \$100.00. Since October the donor has given a total of \$7,040.00 in matching funds. The donor will continue to match new memberships and increases in membership up to a total gift of \$10,000.00. This gift will be used to establish a Special Fund that the Friends can use for the long-term benefit of the CNA.

Around the Campus Natural Areas

Friends of the CNA Picnic Point Entrance Project

FCNA Volunteers, with the aid of UW Grounds personnel, students, and other hard workers, have removed many invasive buckthorns and planted native understory trees and shrubs, woodland wildflowers and ferns in their place. Work began in the early spring and maintenance has continued throughout the summer. We will plant more shrubs very soon and at the same time remove more of the aggressive invasives. Our aim is to restore the vegetation of this small area to native woodland with as much species diversity and forest complexity as possible. After this section is well-established, we will apply for a permit to expand our efforts to connect the Entrance Project with the Upper Bill's Woods Planting Project area. Here, restored woodland understory vegetation is beginning to spread naturally.

Garlic Mustard: Efforts to Eradicate a Noxious Weeds

Long-term efforts to control garlic mustard have begun to produce results in the CNA. Garlic mustard is a non-native, invasive biennial that kills native woodland understory plants by shading them out. The last few years second year flowering plants have been sprayed with glyphosate (Roundup) in the early spring. Subsequently volunteers have pulled the remaining plants. Since each plant produces more than 100 seeds that can be tracked through the CNA by humans and animals, vigilance is required to get every plant. Volunteers spent hours scouting and clambering under honeysuckle, through burdock and nettles, to find and collect the plants and prevent additional seeding.

The amount of garlic mustard in the CNA has declined. Three years ago one volunteer pulled 240 bags of garlic mustard by herself. Today in some of the previously most heavily infested areas only scattered garlic mustard plants remain and native plants are recovering. However, continued vigilance is needed. Water and disturbance transfer plants to new areas. First year plants, which resemble violets, are still present in many areas of the CNA. Furthermore, even if no plants go to seed, garlic mustard seeds from last year can germinate for up to seven years.

2002 Breeding Bird Update

The birds breeding in the CNA varied little over the three years of the Breeding Bird Study. In 2002 for the first time Yellow-billed Cuckoos probably nested. A Prothonotary Warbler sang in the Picnic Point Marsh for several weeks, but Tree Swallows kept possession of the houses. The number of Scarlet Tanagers and Willow Flycatcher pairs were higher than previous years. The Sandhill Crane pair probably attempted to nest in the University Bay Marsh again. In 2002, 60 nesting species were Confirmed (Yellow-throated Vireo, Chestnut-sided Warbler, Common Yellowthroat, and Wood Thrush were new), 14 species were Probable (5 Confirmed another year), and 8 species, including Woodcock, were Possible (4 Confirmed another year). The 3 year totals were 69 Confirmed, 11 Probable, and 6 Possible breeding birds in the CNA. (See the FCNA Web Site for additional information.)

Saving a Marsh: An Environmental Success Story

by Roma Lenehan

In 1967 dumping was rapidly filling a flooded cornfield near Picnic Point. The University planned to construct a deep lagoon, similar to Tenney Park, with formal landscaping surrounded by parking lots. A 1969 student team served as a catalyst to get the UW administration to change the plans and create the Class of 1918 Marsh. Over the thirty years of its existence, this reconstructed Marsh has harbored wildlife, educated students, and provided recreational opportunities.

A Brief History

In 1968 the area the Class of 1918 Marsh occupies was far from pristine. Once a sedge meadow separated from the lake by a sandbar, this area became a marsh connected to Lake Mendota when the Tenney Park Dam raised the lake level. In 1892 and 1893 the predecessor of the Madison Park and Pleasure Drive Association built Willow Drive by putting fill on the existing sandbar. In 1912, in order to drain the 84 acre Marsh for experimental agricultural fields, the School of Agriculture used Willow Drive as a dike. After initial draining methods failed, they tiled the field and used an electric pump to pump out the water. This innovative method was used to drain many marshes. By 1922 all 84 acres were under cultivation. Usually the fields grew corn for silage for the UW dairy herd. Cow manure was used as fertilizer and the undigested seed in the manure served as food for waterfowl and game birds. When pheasants and other birds ate the corn. Aldo Leopold was asked to solve these "pest" bird problems.

By the mid-1960s, the area was no longer farmed. The peat had oxidized and shrunk and the land compacted. As a result, during plowing the tiles were dug up or broken, preventing draining. The fields, now below the level of University Bay, flooded again. To fill the area, the University put in construction waste while others dumped trash into the fields. However, despite the disturbances by trucks, the flooded fields attracted hundreds of waterfowl and shorebirds.

The Original Plan

The original plan called for a very different landscape. As a fiftieth anniversary gift, the UW Class of 1918 gave \$50,000 to construct a deep Japanese-style lagoon with an island and a bridge. The area was to have formal ornamental plantings. UW Parking Lot 60 would be divided into multiple smaller lots, making parking more convenient and increasing the number of parking spaces. The remainder of the land would become playing fields and other recreational areas.

Efforts to Save the Marsh

A team of 11 students in Clay Schoenfeld's fall 1969 Environmental Management 300 was instrumental in changing the plans for the Marsh. They concluded from their study of the Marsh that this area was more valuable as a natural wetland supporting wildlife and as a teaching and research site than as an ornamental pond for recreation. They lobbied the University to change its plans. The students organized a "camp-in" at the marsh to stop dumping. Attention from the local papers and the lack of a license for the dump soon ended all dumping. However, the fill reduced the Marsh from 30 acres to less than 15 acres. In March 1970 the students presented their alternative plan to the Campus Planning Committee. Despite a decrease in parking spaces, the Committee agreed to the Marsh plan. Faculty members presented the new plan to the Class of 1918 who agreed to reallocate their gift to restore the Marsh.

Restoration of the Marsh

Many people were involved in reclaiming this degraded area and restoring it to a Marsh. James Zimmerman and the UW Arboretum played a key role in designing the reconstruction. Some of the waste had to be removed and the edges graded into gradual sides. Zimmerman's students and other classes planted wetland plants in the marsh and prairie plants on the south and west edges. To encourage people to appreciate the Marsh, a trail with bridges was built, benches were placed, and 32 educational signs written by Zimmerman were placed around the marsh. This Marsh, dedicated to the Class of 1918 on May 19, 1972, was one of the earliest Marsh restorations. The Marsh became a prototype for other restorations.

Wildlife in the Marsh

The restored Class of 1918 Marsh has become a home for wildlife. Mink, muskrat, and raccoon occur regularly. At times the Marsh had so many muskrats that they ate all the cattails, eating themselves out of a home. Today geese nest on the muskrat lodges. Waterfowl, especially dabbling ducks, visit for extended periods in the fall. For several years Black Tern, Yellow-headed Blackbird, and Moorhen nested. Sora, Virginia Rail, and Marsh Wren continue to nest.

For more information on the Class of 1918 Marsh including references, pictures and information on its current challenges, see the FCNA Web Site.

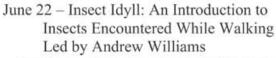
I would like to thank Thomas Brock and Ann Burgess for their extensive help.

FCNA June Field Trips

June 15 – Signs of Mammals in the Campus Natural Areas Led by Rebecca Christoffel



Finding Footprints





Capturing insects on the Biocore Prairie



Rebecca finds the evidence of a mammal attack on a snapping turtle nest



Roma Lenehan, Ed Bottemiller, and Eric Rossborough listen as Rebecca answers a question



Andrew explains, "A diversity of plants provides a diversity of insects in mind boggling numbers."

Join the Friends of the Campus Natural Areas					
Name		•	Student	\$10	
Address			Individual	\$20	
City, State		Zip Code	Household	\$35	
Phone (optional)	Email (optional)		Steward	\$50	
Please send me information about how to volunteer			Patron	\$100	
(Include your email address or telephone number if you would like to volunteer.)			Other		
	Please write your c	check to the Friends of the C	CNA		
Mail this form with your check to: FCNA P.O. Box 55056 Madison, WI 53705					
The	e Friends of the CNA	is a 501(c)(3) non-profit org	ganization.		

FCNA Donates \$10,000 to Rehabilitate Area

The Friends of the CNA donated \$10,000 to the CNA to solve the erosion problems in the Angler's Cove Parking Lot in North Shore Woods. The money will be used to demonstrate local support in an application for a \$40,000 grant from the DNR. The UW already has \$140,000 of other state funding. Preliminary plans for the project call for decreasing the size of the parking lot and replanting much of the area in native plants. Efforts will be made to stabilize the shoreline and the erosion gullies in the area. Pedestrian access to the lake will be improved. Most importantly for the long-term success of the project, efforts will be made to decrease storm water runoff upstream by building rain gardens and decreasing the amount of impermeable area at Eagle Heights Apartments. Students will be involved in all aspects of the project.

Fall Volunteer Opportunities

Join us for regular FCNA work parties on Saturdays from 9:00 to 11:30 A.M. Fall work parties begin September 7. Novice and experienced workers are welcome. Most work parties will be in the Upper Bill's Woods Planting area (follow the signs from the Picnic Point entrance). Work parties will be cancelled in stormy weather. We will email volunteers the time and place and projects being undertaken. If you wish to receive schedule information, send your name and email address (or your phone number) to Glenda (cdennist@facstaff.wisc.edu or 231-1530).

As part of our restoration activities, we will plant oak seedlings, donated woodland wildflowers, and, if we get them, prairie and savanna seeds.

In addition to physical work outdoors, we have indoor volunteer opportunities. All of our committees welcome new members. We are looking for an artist as well as someone familiar with computer graphics and layout design. We need volunteers to help with publicity and educational events. Opportunities exist for people with organizational and fundraising skills. To volunteer, contact Roma (rlenehan@chorus.net or 238-5406).

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