# DuPage Sierran

Summer 2013

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Sierra Club, River Prairie Group of DuPage County

### Innovative Utility Ensures Funding for Storm Water Management

By Meg Dedolph



Pictured: Flooding in Lombard April 18, 2013. Photo by Brian LaVaque.

n April, Linda Sullivan of Lombard woke up to an unpleasant surprise.

"I went to bed, and everything was dry and I got up and everything was a lake," she said, describing the rainstorm that flooded communities throughout the Chicago area, leaving basements – including hers – swamped. A similar heavy storm in 2010, which filled her basement with backed-up sewage, prompted her to join a neighborhood group to encourage the village to make improvements to its stormwater management system.

"The thing that stuck in my mind is the emotional toll the flooding took," she said. "The men were angry to the point of hurting their health and the women, oh, the anxiety they expressed. One said, every time it rains, I worry so much I can't sleep."

Others in the area are thinking about storm water as well, including the village of Downers Grove, which instituted a new stormwater fee this year.

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### **DuPage Sierran**

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Though it seems like a detail of municipal finance, the village hopes its stormwater fee will mean more rain barrels, more permeable pavers and a guaranteed income stream for the village to repair and improve its own storm water management system.

Downers Grove started charging property owners the fee in January, to pay for stormwater system maintenance and improvement, rather than taking

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# ...Storm Water Management Continued From Page 1

that money from property tax revenues. The money collected through the fee – about \$3.3 million – is used to maintain the village's stormwater management system, from sewer pipes to streams, ditches and culverts.

"The reason for actually breaking out the fee from the property tax is to create that sustainable funding," said Doug Kozlowski, the village's communications director. "We know the funding will always be there and be earmarked for the ongoing maintenance and to operate the storm water system."

There can be competing interests for general fund money, he said, but special funds ensure that certain village functions get the money they need.

To calculate the fee, the village looked at the amount of impervious surface area on a piece of property – parking lots, roofs, sidewalks, driveways, swimming pools, patios – anything that keeps storm water from being absorbed into the ground.

Depending on the square footage of impervious surface, the property owner is charged a fee ranging from \$6.30 to \$12.60 a month.

By adding features such as rain barrels, a rain garden or permeable pavers, a property owner can get a one-time credit starting at \$25 for a rain barrel and going up to \$300 for permeable pavers.

Before, there were no incentives for property owners to take steps to manage some of their own runoff. As of March, Kozlowski said property owners have received about \$4,800 in incentives, and local schools and park districts have also received credits.

"We've had rain barrel credits issued, and we've recently begun again our sale of rain barrels in order to try to encourage that type of activity," he said. "We've had several partnership credits with school districts, so they, in exchange for providing curriculum relative to the importance of stormwater and best practices, they're able to get a per-student reduction in fees for their property as well."

By charging the fee, the total property tax levy is expected to be reduced by about \$2 million, Kozlowski said. On average, that means a property owner's tax bill will go down by about \$100, he said.

"The other part about this system, from a transpar-

ency standpoint, it does not get any clearer what the cost to operate the system is," he said.

It's easy to tell what individual properties contribute to the system and what they are charged, and then how that money is spent.

"When you look at a property tax bill, you don't have the benefit of seeing any type of itemization other than what each entity on the bill has levied," he said.

The village heard from some residents unhappy with the change, he said.

"There are people that we've heard from that don't really understand that this is essentially a new way to pay," he said. "It is not an additional charge, and, in fact we've reduced our property tax."

The village established a hotline for people to call if they wanted to find out in advance how much



their fee would be, and also set up a special email address that handled thousands of queries, Kozlowski said.

In making this change, Downers Grove joins Aurora, Highland Park and Rolling Meadows, who have similar systems.

"We get quite a few calls now from people wanting to know how we went about it and how it's going," he said.

But the recent heavy rains that flooded thousands of homes in the Chicago area, submerging roads and causing evacuations in some communities were

### Missing Illinois' Lost Wetlands

By Jack Darin, Director Illinois Sierra Club

The massive storm system that waterlogged Illinois in April reminds us how much we miss a piece of Illinois' natural heritage that has been largely destroyed – our wetlands.

Wetlands are nature's sponges, and the ones that are left offer tremendous flood protection. According to EPA, one acre of a typical wetland can store a million gallons of water, or three-acre feet. An acre-foot is one acre of land, about three-quarters the size of a football field, covered one foot deep in water.

Trees and other wetland vegetation help slow the speed of flood waters. This action, combined with water storage, can actually lower flood heights and reduce the water's destructive potential.

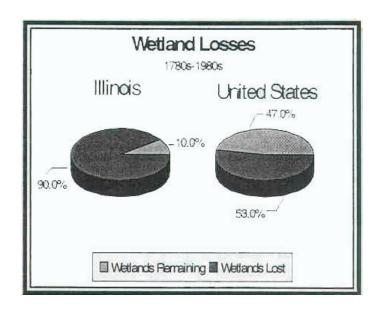
Illinois has lost more of its wetlands than most states.

According to the Illinois Department of Natural Resources:

"When compared with other states, the scope of wetland loss in Illinois becomes more clear. Illinois ranks sixth in overall percentage of wetland loss, behind California, Indiana, Iowa, Missouri, and Ohio. In terms of acres of wetland loss, Illinois ranks fifth. Only Florida, Texas, Louisiana, and Arizona have lost more acres. Because of the large percentage and acreage of wetlands that have been lost, Illinois is in the top 10 percent of states with the greatest overall wetland loss over the past 200 years."

Wetlands are also very good at filtering pollution out of our water supply, and provide critical wildlife habitat for most species. But during the recent flooding rain event we were especially missing their flood protection superpowers.

We've lost about 8.5 million acres of our original wetlands. If we still had them today, they'd be keeping 8.5 trillion gallons of water out of basements, streets, businesses, and buildings.



# ...Storm Water Management Continued From Page 2

so beyond the ordinary that even the best stormwater system would have been overwhelmed, Kozlowski said.

"It was as if the entire state was paved, totally impervious," he said. "When you have the level of ground saturation we had, there was nowhere for the water go to. It's nearly impossible to size a system for an event of that type."

What the flooding did teach the village, though, was that maintenance and improvement of its stormwater system should be a priority, Kozlowski said

"We had over 1,000 homes with flood damage," he said. "We think what we've done went a long way to reducing the impact as to how long water was impeding life here in Downers Grove. There are still improvements that need to be made, but the infrastructure we've put in place and maintained was able to accommodate and remove water from our public ways in some parts of town."

### **Creek Lessons**

By Lonnie Morris

Deeply learned childhood lessons come from parents, teachers, friends and sometimes from the landscapes of our backyards.

When my family was seated at the dinner table, we filled in conversational gaps by gazing at the creek wending through the back yard, searching for birds or wildlife. If debates between teens and parents became overly heated, the view offered a cooling escape. In its many guises, the creek became as familiar as a member of the family.

Buttonwood creek had shaped the landscape, carving a valley between two modest ridges. The house sat on one, safely above the flood plain, high enough for a good view up stream and down. Some winters the creek over ran its banks and froze before the water receded, transforming the valley into a vast skating rink. The wide frozen expanse was an invitation to skate during winter evenings. Dark ice dotted with milky air bubbles mirrored the stars arching overhead while a solitary figure silently etched widening circles on the slick surface.

After school my brother and I strapped on skates, following the creek upstream, beckoned by what we'd find around the next curve, too often finding the telltale signs of fast running water covered by thin ice and skating home with frozen feet.

In spring the mild mannered creek briefly came into full spate, hurtling debris downstream in its churning brown water. Trees, lawn chairs and odd household goods paraded through the backyard. The surprisingly buoyant cement mixing tub bobbing along was rescued and quickly commandeered. Carrying one passenger, it dipped wildly in the bloated creek, pushed and pulled by too much water in too little space. The novelty of the improvised boat inspired the gift of a plastic one from amused parents. Lighter and prettier, it lacked the sturdiness of the tub and quickly came to an end in a collision with a tree.

The creek gave my sportsman dad a place to teach his daughters how to bait a hook and prop-

erly remove it from a fish. We learned to recognize the profile of kingfishers perched on the branches of butternut trees growing along the bank and their distinctive "rattle" as they flew off. Summer time, my sister, brother and I built dams and swam, salting off the leeches clinging to ankles and legs with the casual indifference that comes from doing something often.

The most fundamental lesson the creek taught was the experience of being without water. After drilling several wells and hitting briny water with each, my father plumbed the house with water from the creek. In a severe winter, the creek froze solid at the intake, leaving us without water until a thaw. We managed by showering at school, filling containers at my grandmother's house 20 minutes away and being conscious of how much water was needed for each task. As a kid, the situation was taken in stride and simply understood as the way things were in my family, sometimes there was water, and sometimes there wasn't.

Growing up, I had direct knowledge of where my water came from, it was always visible from the kitchen window, it was my companion in games and adventures. It was part of a community that included fish, birds, plants, people, cows on a neighboring farm. The creek's presence taught lessons about the direct connection between people and water and deeper ones about the rhythms of change. It left an appreciation for finding the middle ground between the benefits of being high and dry and the pleasures of immersion. The lasting lesson carried through a lifetime has been how to go with the flow.

#### About the Author

Lonnie Morris grew up in rural upstate New York outside of Rochester. A childhood spent outdoors left a lasting connection with nature, providing the foundation for becoming a volunteer prairie restorationist and Sierra Club activist.

# Yes, Virginia, There Is a Water Sentinels Program

Fran Caffee

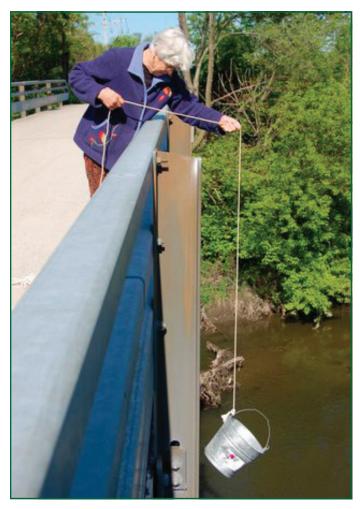
Sierra Club's Water Sentinels Program has suffered from economic hits like most of the rest of our economy in the past few years. It has gone from being a multi-million dollar/multi staffed program to strictly a volunteer entity. But we are still here, restructuring and reinventing ourselves as we go along.

You may be asking, "What is a Water Sentinel? And why do I care?"

Webster says a sentinel is one who stands award but our Water Sentinels go beyond guarding. Water Sentinels are Sierra Club volunteers who believe everyone deserves clean drinking water, rivers should run free of dams and everyone lives downstream. So our Midwest Sentinels map an area, a river, stream or wetland, then monitor it by collecting water samples that are analyzed for levels of dissolved oxygen and pollutants such as nitrogen and phosphorus. The results are made public and if levels are elevated and they usually are, it triggers our very competent staff and senior volunteers to seek leaislative or other means of correcting the problems. These are projects that take years, the cooperation of local governments and patience. Much patience. It is our goal that the Fox River will be relatively free of these known pollutants by 2035. In the southwest, Sentinels may be working on water equity issues, or dam removal in the northwest and northeast. Florida's beautiful waterways have the worst algae pollution in the country from agricultural runoff.

The river monitoring program began locally with the Valley of the Fox Group in 1994 with the River Prairie Group's program starting up in 2000. The most recent report, As the River Flows summarizing the RPG's data and health of DuPage's rivers is available on-line at http://illinois.sierraclub.org/rpg/

In Oct 2012, Water Sentinel staff and volunteers were told the program would cease to exist as of the end of the year. It saddened me that the conference call announcing the decision took place on the 40th Anniversary of the Clean Water Act. Several epic battles later, Scott Dye, WS National Director and I, a volunteer Co-Lead were told one staff [Scott] would remain with a budget of \$30,000 for one year to continue the work at selected sites. We were also tasked with working with Chapters such as IL, AZ that have successfully self-funded, and con-



Pictured: RPG water collector Jane Foulser dipping a sample from Salt Creek. Photo by Lonnie Morris

tinued their fantastic programs. In Feb. 2013, Scott resigned, leaving me!

In order to make this a chapter and not a book, I will be brief here. The WS Program has been integrated in to the Activist Network, an on-line organizing initiative, which itself is undergoing reinvention at the direction of the Board of Directors. Reorganizing seems to be what SC does best even when it doesn't appear necessary. http://connect.sierraclub.org/ActivistNetwork/home

So how does this affect us in the IL Chapter Groups, including the River Prairie Group? We will continue as we are doing now under the direction of the IL Chapter Clean Water Advocate, Cindy Skrukrud with help from Jen Hensley and the designated

Continued on Page 7...

### A Homeowner's Guide to Nutrient Reduction

By Tracy Yang

With Spring upon us, now is a great time for a reminder to homeowners that many choices you make can have a significant impact on the health of Illinois' rivers, lakes and streams. You can have a beautiful home, lawn and garden without hurting your nearby waterways!

#### What are nutrients?

Phosphorus (P) and nitrogen (N) are naturally occurring nutrients critical to plant growth. In nature, they are typically found at very low levels in water bodies, and thus are a limiting factor in ecological processes. Nutrient pollution occurs when excess phosphorus and nitrogen are added to rivers, lakes, and streams, essentially over-fertilizing the water and promoting excessive algae and plant growth.

#### How do nutrients get into our waters?

The major sources of excess nutrients in our waterways are three-fold.

Agricultural Runoff contributes a significant amount of nutrients to our waters via direct runoff from soils enriched with fertilizers and animal manure.

Sewage Discharges and Combined Sewer Overflows: Many sewage treatment plants do not remove nutrients from their treated effluent before it is discharged into waterways. Studies estimate that 47% of the phosphorus in Illinois rivers comes from sewage effluent. In addition, some cities, like Chicago,



Figure 1: Algal blooms create unhealthy conditions in waterways. Photo by Albert Ettinger.

store runoff in the same system as the city's sewage, known as a combined sewer. During storms, these sewer systems can become overwhelmed and overflow a mixture of stormwater and untreated sewage.

Urban Surface Runoff picks up nutrients from private lawns and gardens, thus introducing more nutrients into our rivers, streams and lakes.

### Why are excess nutrients in our waters a problem?

Algal blooms and aquatic plant growth create unhealthy conditions which adversely impact aquatic life, drinking water and recreational uses (figure 1). During the night, dissolved oxygen (DO) in the water can drop to critically low levels for fish and other aquatic life due to nighttime oxygen consumption by the excessive plant and algal material. Low DO can cause fish kills, and excess algae means water treatment plants have increased costs to address odor and taste problems in drinking water. In rare instances, blue-green algal blooms can produce algal toxins that pose a health risk to people and animals.

#### About the author

Tracy Yang is the Clean Water Organizer for the Illinois Chapter of the Sierra Club. A native of the Pacific Northwest, she has worked on many projects, at home and abroad, that focus on balancing human interactions with the world's water resources. Tracy holds a bachelor's degree in architecture with a minor in structural engineering from the University of

California, Berkeley, and a MS in environmental engineering from Northwestern University.

Figure 2: The three numbers on a fertilizer container lists its percent nitrogen, phosphorus and potassium content, in that order. A zero in the middle means a phosphorus-free fertilizer.

Photo credit: Minnesota

Department of Agriculture



### Reduction Strategies for Homeowners

#### **Outdoor Nutrient Reduction**

#### **Indoor Nutrient Reduction**

Limiting fertilizer use is key to reducing nutrient loading in runoff. Here in Illinois, soil phosphorus levels are typically sufficient to grow healthy turf grass. Purchase phosphorusfree lawn fertilizer by only buying fertilizer in which the center number is '0'. (Figure 2)

Inside your home, be sure to double check that your liquid dish soap, laundry detergent, and dishwater detergents are all phosphate free.

If you hire a lawn care company, make sure they are complying with Illinois law1 and are using nophosphorus lawn fertilizer.

To combat nutrient runoff, using native plants in your garden is the most effective method of reducing need for fertilizers. Native plants are naturally adapted to the Illinois climate, and once established, can be grown without the need to fertilize or water.

Arranging native plants into rain gardens is doubly effective, since rain gardens increase soil porosity and the ground's capacity to absorb rainwater. Using rain gardens has proven to reduce overall water runoff into our sewers. Read more at http://prairierivers.org/raingardens/

Disconnecting your downspouts and installing rain barrels to catch water collected from the roof will further reduce runoff. This water can be then used to water plants and gardens during non-rainy weather. Excessive private water usage can keep sewage treatment plants from operating most efficiently. To reduce your indoor water use, consider the following to help you save money along with Earth's most precious resource:

- Purchase low flow shower heads
- Use shower timers
- Turn off faucets when brushing teeth
- Check your indoor pipes for leaks

Pictured: RPG water collector Jane Foulser preparing a sample for testing. Photo by Lonnie Morris

### ...Water Sentinels Continued from Page 5



water apprentice staff member. In addition, we have a strong Chapter Volunteer Team chaired by Frank Orto and myself and we would love to have a few more members.

Our Clean Water Advocate is funded by grants secured by chapter staff's successful grant applications. The volunteer team is providing additional funds through fund-raising events for purchasing water testing supplies to ensure the excellent work being done by groups will continue.

An upcoming fund raising event is a Paddlewheel Boat trip on the Fox River on Aug. 10, 2013. This fun outing is open to Sierra Club members and the general public. Additional details will be available on the Illinois Sierra Club calendar. http://illinois.sierra-club.org/events.asp

So yes, Virginia, there is still a Program [with a capital P, according to Sarah Hodgdon, National Conservation Director] and there certainly is still work to be done. Consider joining the RPG's water monitoring program, the Chapter Team or form a "P Team" consisting of 2 volunteers, trained and equipped to monitor phosphorus in area streams.

Interested "P Team" or chapter volunteers can contact Fran Caffee. RPG volunteers are invited to contact Bonnie Blake.

Fran Caffee fran.caffee@gmail.com Bonnie Blake BBlake1892@aol.com

#### About the Author

Fran Caffee has been a Sierra Club volunteer for 25 years, leading outings, heading up water programs, and serving on state and national committees. Fran has been an Aurora resident since 1961 and active in neighborhood, forest preserves and other environmental and civic organizations, with frequent appearances before the City Council in Aurora as well as neighboring communities.

# Spring in Chicagoland: Reframing the Chill & Flood

By Paul Mack

We live in a consumer economy. We live in a consumer economy. We live in a consumer economy.

The things in life that we are least conscious of are usually the very things that we are most familiar with. To wit, we are so fully immersed in our consumer society that we are barely aware of it, even though we identify ourselves as "consumers", are endlessly apprised by economists of "consumer" trends (consumer loans, consumer spending, consumer price index), and frequently talk about the amount of calories or medications or gasoline that we "consume". In fact, we spend most of our waking hours (and much of our sleepy ones) consuming something—food, fuel, chemicals, electricity, cellular minutes, water, TV/ Internet news and entertainment, cosmetics and personal care products, etc.

Resource use and pollution are natural components of a consumer economy; hence, the constant tension with environmentalism is less the result of greed, malfeasance, or expedience than the more fundamental friction that always results from forcing a square peg into a round hole. A consumer economy has no built-in provisions for resource protection, and thus will resist any effort by individuals or government regulators to impose constraints upon it. This past spring provided two weather aberrations to highlight the inflections of that tension.

April Showers Bring...Wait, What??

Doesn't the old phrase "April showers bring May flowers" seem quaint nowadays?? Proverbs inform the conventional wisdom of a society, and are disquieting when they no longer reflect reality. Weather has grown so extreme and unpredictable over the past decade that we could devote an entire column in this newsletter to new turns on old language—"April showers bring record floods", "April chills delay May flowers", and so on. After all, it was language—and specifically, the manipulation of it—that played a pivotal role in the public discussion of spring's two unusual events.

First, there was the unseasonable chill, which tria-

gered groans of impatience from those awaiting spring's arrival, as well as a collective sigh of relief from those who haven't yet come to terms with global warming. "Unseasonable", of course, means "deviating from the historical average", and since the weather has been trending in the "unseasonably warm" direction, any move in the opposite direction is welcomed as a rebuke of global warming. "Unseasonably cool" is a phrase that reassures us that we can keep driving that SUV for a few more years.

When the weather resumes its "unseasonably warm" habits—as it inevitably will—notice that it might be accompanied by the phrase "climate change". But, the increasing use of that term does not represent a change-of-heart by business, the media, or society. Rather, the bizarre weather that ordinary folks are witnessing in all parts of the world is becoming harder and harder to ignore, and "climate change" is a phrase that grudgingly acknowledges changing weather patterns without all of the baggage of "global warming". "Climate change" is a neutral euphemism which neither admits that temperature is moving up or down, nor points an accusing finger at its source (the consumer economy); it is a guilt-free phrase that promises to offend neither advertisers nor the audience of readers, viewers, and listeners. The universal substitution of "climate change" for "global warming" is nearly complete, as if a search-and-replace has been surreptitiously performed in all of our word processors.

The second unusual event of spring 2013 was its record precipitation. Heavy rains arrived on the heels of a drought-stricken 2012, and meteorologists gleefully declared an end to the drought, with April's record-busting rains erasing 2012 deficits. Hurray!

...Not so fast. In theory, April's 8+ inches of rain erased the drought. In reality, the "perfect storm" of heavy rains on saturated soil caused much of that

# ...Chill and Flood Continued from Page 8

water to run off; hence the widespread flooding and rivers breaching their banks. Droughts lead to the depletion of both deep soil moisture and aquifers, and fast, heavy rains replenish neither. Thus, it is likely that our record rains did not erase the drought, and are now pouring into the Gulf of Mexico after their long trip down the Des Plaines, Illinois, and Mississippi rivers. (One upside to runoff is that the Great Lakes have risen several inches this year, regaining some of last year's losses.) By misleadingly tethering storms to a drought, deceptive language sought to reframe a historic (and yet, increasingly common) flood as auspicious, as if the effects of global warming occur in dichotomous pairs which harmlessly cancel each other out in some sort of reassuring zero-sum climate. Some final thoughts...

Spring 2013 might be remembered as the season that was kind to apologists: the onset of unseasonably cool temperatures enabled an implicit denial of global warming, while drought-busting rains became a deceptive rationalization of it. That does not make it unique, as there are numerous other examples of our consumer society's creative use of language to deny or rationalize global warming. For example, after a destructive tornado touched-down in Joplin, Missouri two years ago and Hurricane Sandy visited the east coast last year, momentary lip-service was paid to "climate change", and then each disaster was reframed as an economic opportunity providing construction jobs and a boost to the housing market. In this way, the consumer economy not only manages to escape indictment for contributing to a disaster, but goes on to profit from it.

At the risk of sounding cynical, there is not a lot of good news these days on the environmental front. There is, however, a lot of neutral, marginal, and outright bad news that is reframed as good news, and your job as a reader is to regard such information with a wary eye, rather than accepting it at face-value. The consumer economy will continue to promote itself at the expense of veracity, so a healthy dose of skepticism remains the best defense against complacency.

# Opportunity for High School and College Students

Are you a youth living in Illinois? Are you interested in spending one of the best weeks ever camping, hiking, and enjoying the great outdoors while learning leadership, organizing and other awesome skills? Then you want to go to Sprog!!

Sprog, the Sierra Student Coalition's Summer Program, can teach you everything you need to know to create the positive change you want to see in the world!! This is a youth lead, youth training program that runs for a week over the summer and teaches you invaluable leadership skills while igniting or growing a passion for environmental issues! It is open to youth of all ages. More info is at: http://ssc.org/sprog.

The Illinois Chapter of the Sierra Club is generously sponsoring three youth from Illinois to attend Midwest Sprog this year. If you are interested in attending Midwest Sprog and need help paying tuition, you can fill out the application at:https://docs.google.com/forms/d/1Rddxvr6c8w\_\_I64q6YBhV3XogEbxn55rX-il6n-i2c5c/viewform

Please email Katie at: km.illinois@gmail.com if you have any questions.

The deadline to apply is: June 7th, 2013 at 11:59 pm.

# River Prairie Group (RPG) Outings

**Note:** All local Group outings are offered at cost. Longer and more expensive outings require deposits (ask leader about refund policy). Contact the Leader or Assistant indicated for more information and outing requirements.

Including updates on those below, new RPG listings, and offerings from other local Groups, cur¬rent listings are on the internet at: illinois.sierraclub.org/outings.

For our new Activity Calendar which includes meetings and events, and offers map and direction links, go to: illinois.sierraclub.org/rpg/calendar

### June 9th (Sun) Sierra Club Sponsored Restoration Day

Join fellow Sierra Club members for a fun day at Glacial Ridge Forest Preserve. We will be removing invasive plants such as buckthorn and honeysuckle. See next page for more details.

### Jun 16 (Sun) Bluff Spring Fen Nature Hike, 9 AM

Join us for an easy Sunday morning jaunt through the amazing habitats that comprise the area known as Spring Bluff Fen. Surrounded by one hundred and fifty years worth of serious environmental degradation (gravel pits, dumps, and heavy industry) somehow this small gem of an area was left intact. The prairies, fens and kames are rich in species - both plants and insects, including some species considered rare and endangered. Wet fens, wetlands, dry uplands, and woodlands will be also be explored as we will meander through, identifying plants along the way. Led by assistant leader and naturalist Ed Max, (and possibly a guide from the Friends of the Fen), this rather easy hike will only take a few hours. We should have the chance to see more species of plants (plus insects/butterflies) here than in most other areas due to its diversity and habitats. Protective clothing recommended, plus hat and sunscreen. Cost is \$3. Limit of 20 participants. Leaders are Steve and Donna Turner. Assistant Leader is Ed Max. To register call Ed @ 630 209 3005, or email @ hortus@aol. com

# Jun 29 (Sat) Early Summer 'Rock Day' Canoe and Rock Farm, 9 AM

Come join us for a fun "Rock Day". We will canoe the Rock River and then go to the Rock Farm just

to see what is new. Co-leader is Mike Way. Limit 20 people. Cost \$31/36. Contact Leader Jan Bradford 847-455-2947 ibradford60131@sbcglobal.net

# Jun 30 (Sun) Solar Home, Nachusa and Wind Mill Farm Tours, 10 AM

Kayak or Canoe the scenic Kishwaukee River, Rockford IL. The Kish maintains a class "A" rating from the Illinois Dept. of Natural Resources making it one of the three highest water quality river systems in the state. It has often been described as a "unique aquatic resource comparable to a stream without human disturbance".

The cost of (\$51 kayak)(\$36 canoe) per person includes kayak/canoe, paddle and life jacket rentals, transportation to put-in spot and Sierra Club fees. Leader is Paul Saindon, Assistant Leader is Karen Willden. To sign up, email Paul at paul@pauls.us or call after 5pm 815 310 0001.

### Jul 13 (Sat) - Kayak or Canoe the Scenic Kishwaukee River, Rockford, 9:30 AM

Join us for a spring wildflower hike at these 2 areas. Black Partridge Preserve, dedicated as the second nature preserve in Illinois, is an 80-acre site located in southern Cook County. The trail follows a stream and goes up & down ravines. Messenger Woods, one of Will County's oldest & most unusual sites, covers 946 acres and is known for its abundance of spring wildflowers that carpet the forest floor. Red & white trillium, hepatica, blue-eyed Mary and Virginia Bluebells are the stars of the show. Limit 15. Cost \$3. Leader is Mark Ginger. Assistant Leader is Ed Max. To sign up, contact Mark @ 224-588-5320.

# Sep 12-15 (Th-Sun) Porcupine Mountain Wilderness Fall Hikes, Ironwood, MI (UP)

Two and a half days of hiking at the Porcupine Mountain Wilderness in Michigan's Upper Peninsula with views unlike any other in the Midwest. Towering virgin timber (pines, cedar, hemlock, oak, and maple), secluded lakes, waterfalls and miles of wild rivers and streams make a visit to the "Porkies" a trip to remember. Cost: \$130 includes: 3 nights lodging at the Indianhead Motel, 823 East U.S. 2 (Cloverland Drive), Ironwood, MI. (906) 932-2031. www.indianheadmotel.com., 3 continental breakfasts & Sierra club costs. Full payment required in advance. Limit 14. Leader: Paul Saindon. Assistant leader: Diane Fram. Email Paul at paul@pauls.us to sign-up.

Please note: Logistics require that we drive about 90 minutes to get to our first hike on Friday, 45 minutes on Saturday and around 20 on Sunday.

# Oct 24-27 (Th-Sun) 3-Day Backpack in Hoosier National Forest, Yellowwood State Forest, Nashville, IN

A moderately paced fall color adventure of back-packing, camping, and hiking through the forested hills of south-central Indiana. Learn how the Forest Service is gradually increasing the acreage in this National Forest. Covering about 7 miles on each of 3 days (Fri-Sun), we'll backpack into the forest on Friday, camping by a stream. We will spend the middle day in hiking and exploring this vast wilderness area, and backpack out on the third day. Suitable for beginners in good physical condition, having solid hiking experience, and for experienced backpackers as well. Trip fee is due 6 weeks prior to trip start date. Cost: \$25. Limit 14. Leader is Paul Saindon. Email Paul at paul@pauls.us or Call 815 310 0001 after 5 PM.

For up-to-date information, visit: illinois.sierraclub.org/outings.
And the Activity Calendar at: illinois.serraclub.org/rpg/calendar.



### Sierra Club Sponsored Restoration Day

Join fellow Sierra Club members for a fun day at Glacial Ridge Forest Preserve. We'll begin with site steward Bruce Blake providing a brief history of this unique Glen Ellyn preserve nestled between the Illinois Prairie Path and Union Pacific railroad tracks and a review of the management techniques being used to preserve the plant community. We will be removing invasive plants such as buckthorn and honeysuckle.

Come dressed for the weather, long pants, long sleeves, hat and gloves are recommended. Bring water, bug spray and sunscreen.

When: June 9th 9 am – 12:00 pm Where: Glacial Ridge area of Churchill Woods Forest Preserve

#### We will meet at:

Walnut Glen Park 860 Walnut St. Glen Ellyn, IL 60137

For more information: Contact Steward Bruce Blake at 630-629-2520 or Rllnstns1@aol.com

### Work Day Sign Up

Please register as a volunteer with Natural Resource Management at the Forest Preserve District of DuPage County website- http://dupageforest.com .Follow the link to "Get Involved" then the Volunteer page for Natural Resources. Bring a copy of the waiver with you.

# The Big Thirst: The Secret Life and Turbulent Future of Water By Charles Fishman

#### **Reviewed by Connie Schmidt**

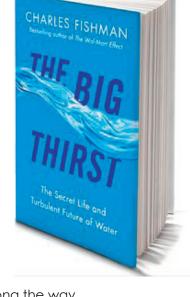
"Water, water everywhere but not a drop to drink!" As I write this, DuPage County has just flooded with record amounts of high water, much of it still standing on roads and in basements. The Big Thirst was read and discussed by the River Prairie Book Club this winter and sparked an enthusiastic discussion. One point highlighted the fact that although water can be plentiful in some locations, its worthiness for dinking may be in great peril. Charles Fishman presents a fascinating look at water through multiple lenses of geography, history and uses.

After a brief introduction, we begin our water discussion in the stars. The origin of the joined molecules draws even the most lay scientist (me) into the history of water's birth. With the simple blending of three atoms, one of the most varied substances on the planet is created. It is transparent, it reflects light, it is soothing, it can be destructive, but it is always indispensable for the survival of living things.

Next, Fishman takes us on an adventurous study of water as we "tour" the planet glimpsing resourceful engineering techniques to conserve, dispense or display water. Our first stop is Las Vegas; home of fountains in the desert. We learn of the creative neactiations, which led to conservation practices while still preserving the beloved water spectacles. With engaging descriptive language, Fishman helps us both admire and wonder at the elaborate fountains along the strip. He travels to Galveston just after Hurricane lke ravaged the community, simultaneously inundating it with floodwater and destroying the local drinking water system. On we go to Asia, Africa and Australia. In each place we meet creative, innovative entrepreneurs working to rescue their cultures from drought and famine. We learn how individuals are encouraging whole populations to change their behavior to reduce the waste of clean, drinkable water, in order to protect their civilization. Conversely we also see stagnant cities continuing down a path of self-destruction, refusing to see the impending doom ahead as water supplies diminish each year.

Fishman takes us on a ride to meet the "movers and shakers" in the water business, sharing remarkable success stories and

cautionary tales along the way.



No book written about water during the last decade can omit a discussion of bottled drinking water. From the manufacturing process to the marketing mecca the absurdity of this phenomenon is deeply affecting our resources. But Fishman takes this question further by examining what we all pay for water, even the delivery to us through our city water supplies. Being a necessity for sustaining life, the question is asked who should own water and who indeed should determine the beneficiaries of its power?

The reason this book may appeal to the Sierran in you, is the emphasis on water issues being "local not necessarily a global issue". What Fishman means by that is, if I limit my showers to six minutes at my home in Warrenville, always turn off the water when brushing my teeth and water my chickens from rain water collected in my rain barrel, it won't impact the water available to those in the Colorado water basin or my sisters in Arizona or the Texas Hill Country, much less the folks in Australia's deserts. Water conservation must be a regional issue. While what one neighbor does to a stream on his land may indeed impact the fellow down stream, water protections must be planned with a watershed in mind. The primary point of this book is best stated by Fishman himself. "This book is an effort to rescue water not so much from ignorance as from being ignored."

#### **About the Author**

Connie Schmidt currently serves on the board of directors for T.R.O.D. and the River Prairie Group of the Sierra Club. Her vision is to promote tolerance and respect for both recreational trail users and those working to restore native habitats.

### **Chasing Dragonflies**

#### **By Cindy Crosby**

In a quest for learning to pay closer attention to the natural world, I identify and count dragonflies. It's a seasonal proposition that begins in early May, and wraps up around the end of September. Each spring, I pack my clipboard, field guides, and binoculars and head out to nearby wetlands to see what I can find. What I find is not always what I came looking for.

Dragonfly monitoring is not a trendy thing to do. If I tell someone what I'm up to, I can count on a moment of awkward silence. Then the puzzled question, "Why would anyone want to count dragonflies?" It's closely followed by "How?"

The answer to "how" isn't an easy one. After nine years of chasing dragonflies, I still find them difficult to identify. When I arrive at my monitoring site for the day, I note the time, location, cloud cover, temperature, and wind speed on my chart. I walk my census routes at a constant pace, scanning the air for winged critters. Not only are they blurs of speed, but males are often colored or patterned differently than females. And don't get me started on the juveniles, which are a different ballgame altogether.

Monitoring dragonflies seems so impossible that sometimes I wonder why I even try. But I keep going out, season after season. I marvel at the play of light on wings, the tiny white dot that tells me this is one species instead of another, the amazing speed in which a dragonfly reverses direction to zap a bug. It's addictina.

Identifying dragonflies requires "staying awake" --paying attention to details. The outflow of monitoring is not just learning about an insect. It's a slowing
down of the pulse, and a feeling of awe, closely followed by gratitude. Your senses open up, and you
notice the smell of the air, the warmth of the sun on
your face. Dragonflies are picky. They won't fly if it's
too windy or wet or cloudy or cool. As you monitor,
you become sharply attuned to shifts of weather.

Monitoring is as much art as science. Each summer, as the dragonflies skim past me, I wonder if I'll ever develop that sixth sense, that intuition, that provides recognition at a glance. Even after almost a decade, a lot of my census route entries are vague; "large darner, unknown" or "meadowhawk, unknown." This is not a pursuit for perfectionists. I've



learned to be comfortable with ambiguity.

The answer about "why" I count dragonflies is a bit easier. For almost half a century, dragonflies have been recognized as water quality indicators. The presence of dragonflies is a positive message about the wetlands they inhabit. Show me a pond or a river without dragonflies, and I'll show you an ecosystem in trouble.

But sitting quietly by a slow-moving stream, watching the dragonflies zoom along the waterway, I forget ID's, census charts, troubled ecosystems, and my particular frustrations of the day. Instead, I relax and enjoy the flash of wings, the glint of sun on metallic body, the buzz-zip of dragonflies spinning through the universe. I don't always know their names. But sharing the world with them is enough.

Good places to see dragonflies in DuPage County include The Morton Arboretum (Schulenberg Prairie, Japanese Slough), Herrick Lake Forest Preserve, Blackwell Forest Preserve, Danada Forest Preserve, and the Lincoln Marsh Natural Area.

#### About the Author

Cindy Crosby is the author of By Willoway Brook: Exploring the Landscape of Prayer about the Schulenberg Prairie, which Chicago Wilderness magazine called one of the region's "great reads." Contact Cindy through www.cindycrosby.com.