



Huron River Report

The Newsletter of the Huron River Watershed Council

Fall 2005

Our Medicated River	p 5
HRWC Turns 40	p 6
The Whole Dam Story	p 10

Mill Creek Spotlight

Communities, citizens, and HRWC work to protect the Mill Creek Subwatershed

Many people in western Washtenaw County are engaged in projects with HRWC to protect Mill Creek.

THE MILL CREEK SUBWATERSHED PLAN

Two years ago, communities and other stakeholders in the subwatershed worked with HRWC to develop the Mill Creek Subwatershed Management Plan, approved by the Michigan Department of Environmental Quality (MDEQ) in September 2003. The Plan identifies current conditions in the system, existing concerns and future threats, and opportunities for protecting and restoring the subwatershed. The Plan is available on HRWC's web site, at www.hrwc.org/program/mid.htm (scroll down to the middle of the page).

The Plan identifies four primary challenges for the subwatershed:

- Heavy nutrient loads – phosphorus is of particular concern because when it enters the creek in excessive amounts it can

cause “blooms” of algae, which in turn deplete the creek of oxygen and degrade water quality. Common sources include eroded soil, farm and lawn fertilizers and industrial strength cleaning products.

- “Flashy” flow rates – when it rains, water washes over paved surfaces and into the streams with great force. This sudden “flash” of water into the creek erodes its banks, increases water temperatures and transports harmful chemicals and sediment from the land to the creek.
- Soil erosion and sedimentation – as the stream channels erode and widen, more sediment is deposited on the creek bottom, trapping pollutants and destroying habitat.
- Other contaminants – oil, grease, heavy metals, and salt have been found in elevated concentrations in the creek. These contaminants poison the creek, harming wildlife and threatening drinking water sources.



Searching for stoneflies in Mill Creek can be challenging. Sue found some open places in the ice at Shield Road in January. —photo: John Lillie

The Plan reports that unregulated nonpoint sources of pollution, like runoff from lawns and farms, contribute 9-10 times more phosphorus to the subwatershed than regulated point sources like wastewater treatment plants. With the continued growth of suburban-style residential and commercial development, the amount of

continued on page 3

Something's Fishy

A fascinating animal found in Portage Creek

Adopt-A-Stream volunteer Maryn Mishler took a team of volunteers to Portage Creek (where Washtenaw County meets Livingston County) on a beautiful Saturday in mid-April for a routine assessment of this fine stream as part of the annual HRWC spring River RoundUp. Although the primary activity in the checkup is to collect benthic macroinvertebrates (insects and other organisms without backbones that live on the stream bottom), Maryn was intrigued by a miniscule creature that looked like a tiny fish stuck to a rock, so she added it to the collection. That turned out to be a brilliant move.

Two weeks later the volunteer teams participated in a second event, ID Day, to identify the creatures they had collected with the help of macroinvertebrate experts. The experts were intrigued with the fish-that-wasn't-a-fish and looked at it under a high-powered microscope. They found it was completely filled with tiny round objects, resembling eggs or miniscule shells. Packed to the gills, you might say.

The experts recommended talking to southeast Michigan's mussel expert, Renée Mulcrone. Renée identified it as the ovisac,

continued on page 4



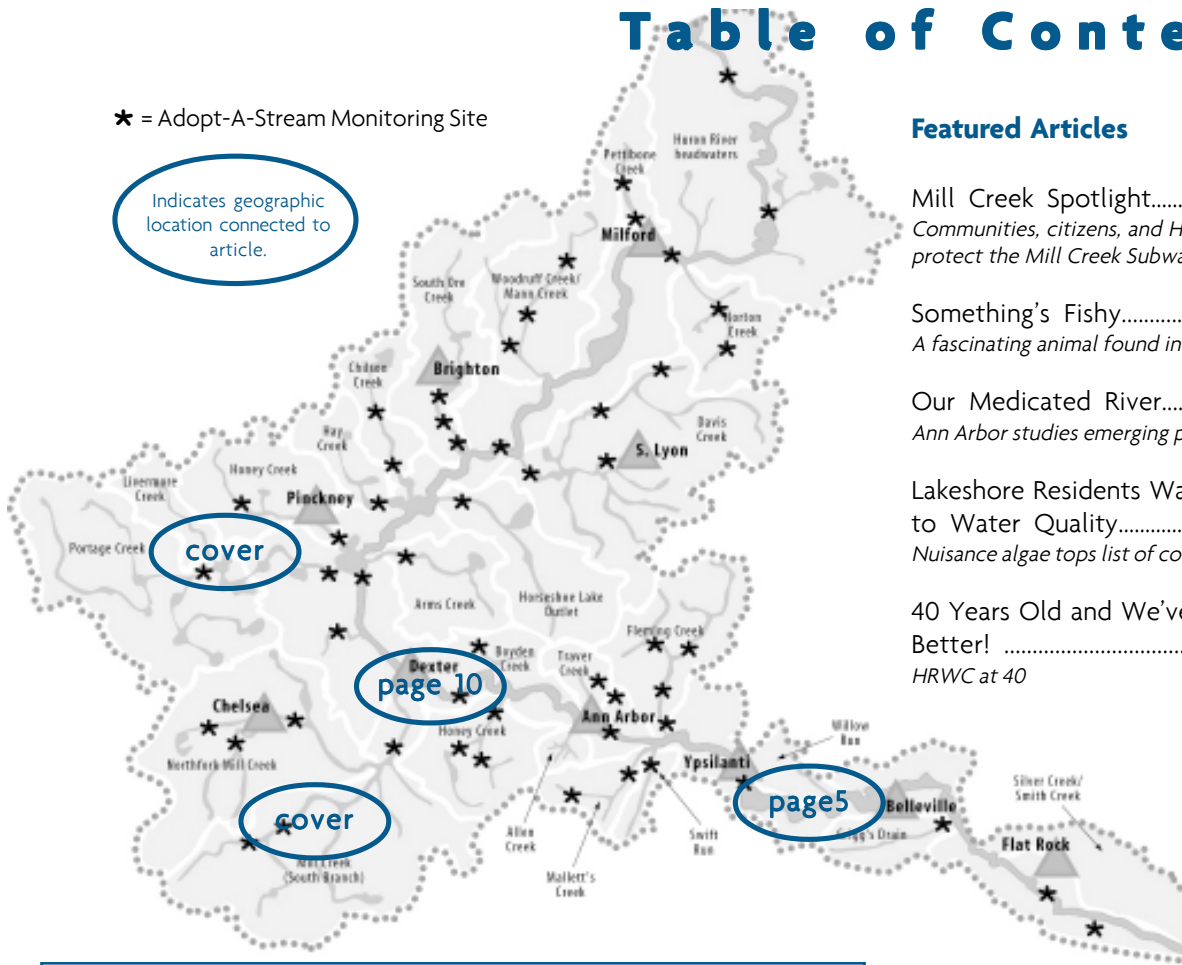
Tychobranthus occidentalis, the kidney shell mussel lives in Portage Creek.

—photo: Chris Barnhart

Table of Contents

★ = Adopt-A-Stream Monitoring Site

Indicates geographic location connected to article.



Featured Articles

Mill Creek Spotlight.....cover
Communities, citizens, and HRWC work to protect the Mill Creek Subwatershed

Something's Fishy.....cover
A fascinating animal found in Portage Creek

Our Medicated River.....5
Ann Arbor studies emerging pollutants

Lakeshore Residents Want Attention to Water Quality.....5
Nuisance algae tops list of concerns

40 Years Old and We've Never Felt Better!6
HRWC at 40

2005 EVENTS

Sunday, Sept. 11, Noon-5 PM
Adopt-A-Stream Leadership Training
NEW Center & nearby stream
Call Adopt at (734) 769-5971

Tuesday, Sept. 20, 7-9 PM
Final Public Meeting for Huron Chain of Lakes Watershed Planning
Genoa Twp Hall, 2911 Dorr Rd, Brighton.
Contact Chris at (734) 769-5123 x5

Saturday, Sept. 24, 9-3:30 or 10:30-5 PM
Adopt-A-Stream River RoundUp
Entire Watershed
Call Adopt at (734) 769-5971

Thursday, Sept. 29th, 7:00-8:30 PM
Final Public Meeting for Lower Huron River Watershed Planning
Contact Elizabeth at 769-5123 x4 for location and details

Thursday, Oct. 6th, 1:00-4:00 PM
Fall Meeting of the Middle Huron Initiative Partners
Ann Arbor WWTP, 49 S. Dixboro Rd.
Contact Elizabeth at 769-5123 x4
Sunday, Oct. 9, Noon-3 or 2-5 PM

Adopt-A-Stream Bug ID Day
NEW Center
Call Adopt at (734) 769-5971

Thursday, Oct. 20 5:30-7:30 PM
HRWC Board of Directors Meeting
NEW Center
Call Laura at (734) 769-5123 x2

HRWC 40th Anniversary Celebration Events
To celebrate the past 40 years we invite you to attend the terrific free events described on page 11

More events and updates on the web at: www.hrwc.org

The NEW Center is located at
1100 N. Main Street in Ann Arbor
Call (734) 769-5123 or visit the HRWC website for directions

Laura's "Stream" of Consciousness..9
HRWC Update

The Whole Dam Story: It's Not Over Yet10
Removal of the Mill Pond dam is one step closer to reality

Other News

Michigan Monitors to Meet!4
Volunteer conference set for October 29

Know Your Board Representative...8
Diane O'Connell, Ann Arbor Charter Twp.

The Huron "Down on Main Street"..9
Huron River art is displayed in downtown Ann Arbor

Business Members.....10

Fall Birthday Festivities are More than Just Cake11
HRWC 40th anniversary celebration events

Thank You!..... back cover

Mill Creek Spotlight

continued from cover

polluted runoff entering the creek will increase. Impervious surfaces will continue to replace woodlands and fields, exacerbating the existing problems.

The Plan presents actions that participants agreed to carry out in order to address challenges to the watershed. Activities include adopting new and revised ordinances, removing the Mill Pond Dam in Dexter, and installing vegetated riparian buffers along the creek.

IMPLEMENTING THE PLAN

Over the past year, with assistance from HRWC, communities have been revising their ordinances to better protect the subwatershed. For instance, the Village of Dexter modified its parking standards to reduce impervious surfaces, Lima Township is considering a wetlands protection ordinance, and Scio Township has enacted one.

Local citizen groups also are finding ways that they can protect the creek. Chelsea Committee for Parks persuaded the City of Chelsea to leave an un-mowed buffer along Letts Creek in Veterans Park. They are planning to present designs to the City for native landscaping and other amenities at

the Park that will reduce runoff and pollutants to the creek. The Village of Dexter has made great strides in its efforts to remove the Mill Pond Dam. See the article on page 10 of this issue for an update.

CITIZEN ACTION AND EDUCATION: THE MILL "BLITZ"

HRWC is in the midst of a two-year project, termed the "Mill Blitz" (funded by the MDEQ), which includes:

- Scientific studies of 15 sites throughout the subwatershed measuring flow, nutrients, the structure of the creek channel, sediment, and the diversity of creatures that live in the creek
- Several articles published in the Chelsea and Dexter papers about Mill Creek and how citizens can protect it
- Citizen roundtables to share local knowledge and priorities about the creek
- Training Mill Creek citizens to be the eyes and ears of the subwatershed, locating soil erosion or wetland violations, responding to permit applications and advocating for stronger subwatershed protection measures
- Educational brochures and a calendar that introduce residents to Mill Creek and suggest simple actions each person

can take to reduce pollution in the creek

Through intense focus on these activities, HRWC hopes to: Increase public awareness of Mill Creek and its importance to water quality and environmental health; Increase public participation in the protection of Mill Creek and the surrounding subwatershed; Gain baseline data about Mill Creek by measuring its



Several articles about Mill Creek have appeared in area newspapers.

flow rates and channel shape; Identify changes in the creek's condition by monitoring the habitat quality and aquatic community within the creek; Protect natural features within the subwatershed, including wetlands, floodplains and the creek itself; and Work toward reducing phosphorus entering the creek by 50% by preventing soil erosion and reducing the amount of fertilizer runoff from homesites.

YOU CAN HELP!

When you help protect Mill Creek, you protect your drinking water, property values and recreation opportunities. Here are a few simple ways you can help:

- Become the "eyes and ears" for Mill Creek. Report anything of concern to the MDEQ Pollution Emergency Alert System at (800) 292-4706.
- Join a Mill Creek stewardship group. Contact Debi Weiker at HRWC at dweiker@hrwc.org or (734) 769-5123 x8 for more information.
- Watch your mailbox for your free 2006 calendar filled with helpful tips and resource information.
- Tell your planning commission and trustees that you care about the health of the subwatershed. Become involved by helping your community develop ordinances to protect the subwatershed. Watch for notices about HRWC-sponsored workshops on this issue. Contact HRWC for helpful model ordinances.

Call HRWC at (734) 769-5123 x8, or visit our website at www.hrwc.org for more information or to share your ideas and ask questions.

— Kris Olsson



Mill Creek subwatershed is the largest in the Huron River Basin at 145 square miles. It includes portions of 9 townships, the Village of Dexter and the City of Chelsea. The stream network runs 226 miles and contains hundreds of lakes and thousands of wetlands. Mill Creek empties into the Huron River just north of the Village of Dexter. — map: Gary Hochgraf

Clever Fish Imitation

continued from cover

or egg case, of a native kidney shell mussel, which has one of the most sophisticated methods known of dispersing their eggs throughout the stream.

While adult mussels remain buried in the streambed, the larvae manage to move away from their mothers. The tiny larvae, or glochidia, are hatched with a mission. Unable to swim or crawl, they hitch a ride on the gills or fins of an unsuspecting fish in order to disperse and to transform into a free-living juvenile. Many species of mussels require a specific species of fish for the

relationship to work; if they attach to the wrong fish they fall off and die. And that is where the ovisac comes into play.

If you were less than half a millimeter long, how would you find and attach to your specific kind of fish? As shown in the photo, the glochidia are packed into an ovisac that resembles a delectable morsel of the favorite food of the target fish. The mother mussel attaches her ovisacs to a stone where, resembling tasty baby fish, they attract rainbow and other darters. As soon as the fish tries to eat the tempting morsel, the ovisac ruptures and the glochidia immediately attach to the gills of their unsuspecting host. After a few weeks of enjoying free transport and protection from their new friend, the juvenile mussels drop off to feed on algae and develop into the bottom dwellers with which we are more familiar. Not only have they received nourishment from the fish, but the larvae are also dispersed to new parts of the river, an important goal for many forms of life.



The kidney shell mussel releases tiny bags of larvae resembling fish or aquatic insects. When darters attempt to eat these, the larval mussels hitch a ride on the fish. —photo: Chris Barnhart

How nice that Maryn was intrigued by the curious form she found on a rock so we could learn about another one of the wonders in the river.

Mussels look like clams but they are not the same. Clams cannot make pearls, but mussels can. The young mussel larvae, called glochidia (glow-kid-ee-ah), are parasitic and spend time with a host animal, usually fish. Clams do not have a parasitic stage. Michigan has only a few tiny species of clams but has nearly 50 species of mussels.

The adult freshwater pearly mussels (Unionids), of which the kidney shell is a member, spend most of their life (for some species that is 100 years!) nearly buried in the river bottom, filtering their food out of the river water. For this reason they are sensitive to water quality, and their presence indicates clean water. They are one of the most endangered groups of organisms in North America. A shocking 71 of the 300 species of Unionids are on the endangered species list!

— Joan Martin

Michigan Monitors to Meet!

Volunteer conference set for October 29



Join stream and lake monitoring volunteers from across Michigan for the first annual conference of the Michigan Clean Water Corps! As reported in the Winter 2004 issue of the Huron River Report, the Michigan Clean Water Corps, or "MiCorps," is a developing network of volunteer monitoring organizations throughout the State that collect and share data with the MDEQ and each other for water resources management and protection.

Anyone interested in volunteer monitoring of Michigan's lakes and streams is invited to participate in the first annual MiCorps Conference, which will take place on Saturday, October 29. The conference will

include presentations by new and established monitoring organizations as well as informative sessions on issues of interest to volunteers, including establishing and expanding volunteer monitoring organizations, securing funding for monitoring efforts, ensuring quality data, and field techniques.

The RAM Center on Houghton Lake will host the conference. Additional registration details for the conference will be announced shortly. For updates or to learn more about MiCorps, visit the program website at www.micorps.net.

— Jo Latimore



Get ready for a year of tips to help your watershed!

HRWC is pleased to announce that the community calendar is back for 2006, with an expanded list of partners! Keep an eye on your mailbox this fall. If you don't receive a calendar by December 1, but would like one, contact Jennifer at HRWC (734) 769-5123 x8.

Our Medicated River

Ann Arbor studies emerging pollutants

The City of Ann Arbor recently released the results of a 2004 study to track pharmaceuticals and personal care products (PPCPs) and endocrine disrupting compounds (EDCs) at four locations in the City's water supply and treatment processes. Environmental advocates and state and local officials worry about how these "emerging pollutants" may be compromising drinking water supplies and aquatic systems. Water quality standards for these pollutants are not yet determined in this country due to insufficient monitoring data.

PPCPs are a grouping of chemical substances that range from prescription drugs to fragrances and cosmetics. EDCs are chemicals that interfere with the normal function of the endocrine system, which includes endocrine glands (e.g., pituitary, thyroid, and pancreas) and the hormones produced from these glands. The wide range of EDCs includes birth control pills, steroids, pesticides, inorganics, and industrial chemicals.

Where do they come from? PPCPs and EDCs can enter the environment in at least four ways. The points of entry include:

- Discharge from wastewater treatment processes such as treatment plants or septic systems
- Regulated and unregulated industrial discharges to surface and groundwater
- Leaking or overflowing animal waste storage from confined animal feeding operations
- Land application of treated animal waste from certain animal feeding operations

The Ann Arbor case study, conducted in 2004 during four sampling events, provides a snapshot of the prevalence and persistence of 22 such compounds within the City's water use cycle, including the Huron River. Laboratory analysis of the water samples detected, of the 22 compounds targeted in the study, 10 compounds upriver of the City. After treatment at the drinking water plant only four compounds were detected in the finished drinking water. Water entering the wastewater treatment plant contained 17 compounds, and 15 compounds remained in the treated wastewater effluent.



Prescription drugs are just one of the types of compounds receiving study in the Huron River.

—photo: Washington State University

Treatment reduced concentrations in the finished drinking water by 23%-50% from the river water. The study's authors report that the removal rates of the compounds through the wastewater treatment process ranged from 0% to greater than 99% with most compounds showing a 90% or more reduction rate from pre-treatment to effluent.

The report is on the City's website at <http://www.ci.ann-arbor.mi.us/PublicServices/Water/WTP/EndocrineDisruptors.pdf>. More information on this topic is available on the internet sites for the U.S. EPA's National Exposure Research Laboratory and the USGS's Toxic Substances Hydrology Program.

— Elizabeth Riggs

Lakeshore Residents Want Attention to Water Quality

Nuisance algae tops list of concerns

According to a recent opinion poll, excess algae that curtails recreational activities is high on the list of concerns expressed by Huron River lakeshore residents. This past spring, researchers at the University of Michigan mailed over 1,000 questionnaires to residents around Ford and Belleville lakes. The survey probed attitudes about water quality and remediation efforts.

To date, 345 residents have completed and returned the questionnaires, providing a reasonable sample of opinions within the community. The mailing predominantly targeted lakeshore residents, and indeed nearly 48% of the respondents reported visiting Ford Lake on at least a weekly basis, and about 45% reported visiting Belleville Lake with the same regularity. They boasted long term familiarity with the lakes, with more than 87% reporting

that they have lived near their lake for more than three years, and several citing decades-long experience. Nine out of ten respondents reported engaging recently in recreational activities along the Huron River or on the lakes.

Nearly two-thirds of the respondents said that the presence of algae has affected their enjoyment of recreational activities on the lakes. Nearly 90% of those responding feel that current environmental efforts are "too little." When asked whether excessive algae growth in the lakes was a nuisance problem, nearly 84% answered "Yes." Asked further to rank the problem on a scale from 1 (lowest importance) to 5 (highest importance) about two-thirds of the respondents listed it as either 4 or 5.

Approximately 84% of the respondents answered "Yes" when asked whether they would support increased effort to control the nuisance problems, even if it meant raising municipal taxes.

This three-year study is financed by a grant from the U.S. Environmental Protection Agency. Additional information and more detailed results, as well as a copy of the questionnaire itself, are posted on the project website: www.umich.edu/hrstudy/ under "Reports and Results." The opinion survey was initiated by Luis O. Rivera, a graduate student in the School of Public Health, as part of his doctoral research. Jennifer Wolf from HRWC provided technical and logistical assistance, and Dan Swallow from Van Buren Township supplied a list of mailing addresses.

— Donna Lehman, University of Michigan

40 Years Old . .

HRWC is celebrating its 40th anniversary this year. This article is the second in a series about the history of HRWC. The previous article chronicled the origins of HRWC leading to the formation of a watershed council.

Since its formation in 1965 (see Summer 2005 issue), HRWC has grown to be a respected voice in the communities it serves and has built a reputation for working creatively and cooperatively to tackle the wide variety of issues facing the Huron River Watershed. What follows is an overview of a few of HRWC's accomplishments and milestones over the years.

EARLY DAYS

The 17 municipalities and counties that founded HRWC were concerned primarily with stream flow and flood control as they affected water supply and wastewater treatment capacity, but their representatives realized that these issues were just part of a much larger picture. During the early years an ambitious statement of goals was drafted and adopted as the study and activity program of HRWC. These included wastewater disposal, storm water runoff, water supply, irrigation, recreation, protection of property values, conservation, wildlife, stream flow, flood control, water quality standards, continuing studies, public education, citizen participation, project and plan review, and watershed planning and management (whew! quite a list). Other priorities of the first five years included emergency

dam flow controls, flood damage avoidance (remember the flood of 1968?), fisheries improvement, inland lake and shoreland management, runoff quality control, and land and water resource planning integration.

Since then, HRWC has served as a venue where local units of government and other stakeholders have discussed problems and sought solutions to these critical issues. During the 1970s, a Flow Advisory Network was established and a report on dam operation highlighted the need for a water supply and drought flow study. During that decade, informational meetings were held on flood forecasting and warning procedures, administration of the Lakes and Streams Act of 1972, and many related topics. Stream flow and flood management continue to be important concerns throughout the watershed as evidenced by the 2004 spring flooding problems in Ore Lake.

Wastewater treatment has always been a concern of HRWC because wastewater is returned to the river. A map of discharge permits within the watershed was published in 1978, enabling local officials to look at the cumulative impact of contaminant loadings to the river. In the early 1980s, HRWC assisted in discussions

regarding a new wastewater treatment plant in Brighton and also organized a task force to examine the extent of onsite sewage disposal problems in the Portage-Baseline lakes area.

STUDYING THE RIVER

For over 40 years, HRWC has produced a significant number of scientific reports that individuals, agencies, and governments use to guide their decision-making. Studies have covered a broad range of topics including coliform bacteria monitoring, fisheries improvement, septic system influences on lakes, groundwater vulnerability, flood control, benthic macroinvertebrate communities, influences of various land uses on water quality, rapid wetland assessments, and existing and lost native ecosystems. These reports include "Flood Forecasting and Flood Warning Procedures in the Huron River Watershed," "The Huron River Watershed, an Interpretation of its Characteristics," "Phosphorus Reduction Strategy for the Middle Huron River Watershed," and "The Mill Creek Subwatershed Management Plan."

In 2003, HRWC created and successfully applied methodologies that help answer the question, "How much development is too much?" as it applies to impervious surfaces and gravel roads. A guidebook and the research behind it provide specific answers to this question in terms to which local government officials throughout the watershed and the rest of the state can readily relate.

Today HRWC's science and policy experts respond daily to residents and government representatives to help them manage development in ways that protect creeks, wildlife, and natural features.

WORKING IN WASHINGTON AND LANSING FOR CLEAN WATER

HRWC has played an important role in the development and passage of statewide legislation aimed at protecting water resources. The Inland Lakes and Streams Act, the Natural Rivers Act, Michigan's Soil Erosion and Sedimentation Control Act, the Septage Waste Haulers Act, and many other acts have benefited from HRWC's expertise and involvement.



Remember the flood of 1968? This home, located in a subdivision in South Rockwood, was in the path of the floodwaters. —photo: HRWC files

... and We've Never Felt Better!

In 1979, HRWC played a significant role in securing a Natural River Designation for portions of the Huron River between Kent Lake Dam and Barton Pond, plus portions of Davis creek, Arms Creek and Mill Creek. The Huron is the only river in Southeast Michigan to have a state-designated Natural River District.

Since the early 1990s, HRWC staff have received and reviewed permit applications for surface water discharges as part of the National Pollutant Discharge Elimination System (NPDES) in the watershed. Changes to the permits and even outright denial are sometimes the outcome of HRWC comments on applications.

STREAM MONITORING BY VOLUNTEERS

Volunteers were instrumental in establishing HRWC, and volunteers have continued to be the lifeblood of the organization. In 1992, the Adopt-A-Stream program began to recruit volunteers to monitor the quality of the Huron River. At the first Adopt river study event, 11 volunteers joined three HRWC staff at Island Park in Ann Arbor for training and then to 6 sites for monitoring. One volunteer participated in the first Stonefly Day in January 1993. Since those early days, the program's ranks have swelled to over 400 volunteers measuring over 70 stream and river sites throughout the watershed, and Stonefly Day has since proven to be the program's most popular event. These studies assess habitat, aquatic invertebrates, water quality, flow, and channel shape, making the Huron one of the best-studied rivers in Michigan.

The Adopt-A-Stream program is now the premier citizen monitoring network in the state, and the MDEQ has contracted recently with HRWC to provide guidance and development assistance to creek and lake monitoring groups throughout Michigan.

MORE THAN JUST THE RIVER

In the early 1990s HRWC began working with communities to protect groundwater that supplies municipal drinking

water. HRWC's award-winning "Community Guide to Wellhead Protection" has helped hundreds of Michigan communities protect their drinking water. The guide is now being used a national model.

EDUCATING THE PUBLIC

From the beginning, HRWC has sought to inform the public about the problems and opportunities to protect our valuable water resources. In the 1970s there were public information meetings as well as testimony and comments made before government bodies considering water issues. HRWC is in its sixth year of implementing an award-winning mass media campaign aimed at changing behaviors to keep our water safe and clean. The campaign's advertisements, direct mail pieces, and images are recognizable throughout the watershed and are effective at changing individual behaviors to protect the watershed. In addition, HRWC offers courses for citizens, businesses, and planners on how to effectively engage themselves in the land use planning process to protect water quality.

HRWC works to inspire people to protect the Huron River system. HRWC's nine-person staff and hundreds of volunteers participate in programs that cover pollution prevention, hands-on citizen education and river monitoring, watershed planning and protection, and mass media education and information.

HRWC was established as an "instrumentality of the State of Michigan" (like an inter-library loan system), with membership limited to governments throughout the watershed. HRWC, with 16 original member governments, reached an all-time high of 40 member governments this year. In 1987, HRWC gained 501(c)(3) nonprofit status and began to admit individual and business members. Currently, 800 individual members and 65 business members belong to the organization.

Over the years HRWC has grown from a half-time executive secretary to occasional full-time staff in the 1970s to 1980s, then three to four staff members in the 1990s, and now HRWC has ten paid staff people. The financial resources of HRWC have grown over the past 40 years allowing the breadth and depth of work to expand. In 1967, the original budget of HRWC was \$16,300. Today HRWC's budget is \$750,000.

Thank you for helping us get here.

— **Laura Rubin and Susan Wooley**



Riverfest 1993 — Canoeists spent seven days traveling the length of the river, ending at Lake Erie. —photo: Ann Arbor News, Curlett. 1993

Know Your Board Representative

Diane O'Connell, Ann Arbor Charter Township

The board representative to the Huron River Watershed Council from Ann Arbor Charter Township is Diane O'Connell. She lives in the Fleming Creek subwatershed with her husband, James Miller, and their three children and two cats.

Diane's interest in water issues began during her childhood in the Chesapeake Bay Watershed area of Virginia. She acted on that interest by studying hydrogeology and groundwater policy in graduate school. Diane has degrees in Elementary Education and Physical Geography. She teaches at Schoolcraft College in the Geography and Environmental Technology Department, where she developed the Environmental Tech program and started a GIS program. Diane's students work with the group Friends of the Rouge River. Many also have participated in the HRWC Adopt-A-Stream bug hunts after being introduced to macroinvertebrate monitoring in the

Rouge. She has introduced her own children to the wonderful world of bug hunts, too.

Beyond her role on the HRWC Board of Directors, Diane is active with other professional and civic commitments. She is the Vice President of the Michigan Association of Environmental Professionals and serves the Township as a Planning Commissioner and a member of the Natural Features Committee. In her spare time, Diane sings in her church choir and enjoys hiking and Pilates.

We are fortunate to have Diane as a member of the Council. If you have any questions, suggestions or comments or if you would like to become



HRWC Board Representative for Ann Arbor Township, Diane O'Connell. —photo: HRWC

involved, call Diane at (734) 997-7234 or the HRWC at (734) 769-5123.

— Eunice Burns

HRWC BOARD OF DIRECTORS

CITY OF ANN ARBOR

Shirley Axon
Dave Borneman
Eunice Burns (Exec. Comm.)
Craig Hupy
Joan Lowenstein
Sumedh Bahl (alternate)
John Hieftje (alternate)

ANN ARBOR TOWNSHIP

Diane O'Connell

VILLAGE OF BARTON HILLS

James Wilkes

CITY OF BELLEVILLE

Steven Walters

CITY OF BRIGHTON

Eric Piehl (Exec. Comm.)

BRIGHTON TOWNSHIP

Mike Slaton

BROWNSTOWN TOWNSHIP

Leonard Mannausa

CITY OF CHELSEA

Brad Roberts

COMMERCE TOWNSHIP

Tom Zoner

DEXTER TOWNSHIP

Kathryn Bowring

VILLAGE OF DEXTER

Paul Cousins (Chair)

CITY OF FLAT ROCK

Ricky Tefend

GENOA TOWNSHIP

Kelly Kolakowski
Paul Edwards (alternate)

GREEN OAK TOWNSHIP

Fred Hanert

HAMBURG TOWNSHIP

Julie Metty-Bennett

HURON TOWNSHIP

Deeda Stanczak
Robert Stanczak (alternate)

LIVINGSTON COUNTY

Jill Thacher (Vice-Chair)

VILLAGE OF MILFORD

Vacant

MILFORD TOWNSHIP

Mary Bajcz

NORTHFIELD TOWNSHIP

Sue Shink

OAKLAND COUNTY

Lev Wood (Exec. Comm.)

VILLAGE OF PINCKNEY

Michael Powell

PITTSFIELD TOWNSHIP

Jan BenDor

SALEM TOWNSHIP

Debbie Lee (alternate)

SCIO TOWNSHIP

Jean King
Gerry Kangas (alternate)

VILLAGE OF SOUTH

ROCKWOOD

Vacant

SPRINGFIELD TOWNSHIP

Vacant

SUPERIOR TOWNSHIP

John Langs

SYLVAN TOWNSHIP

Vacant

VAN BUREN TOWNSHIP

Dan Swallow

WALLED LAKE

Jessie Brewer
Loyd Cureton (alternate)

WASHTENAW COUNTY

Janis Bobrin (Exec. Comm.)
Richard Norton (alternate)
Evan Pratt (Treasurer)
Ellen Scavia (alternate)

WAYNE COUNTY

Kurt Heise

WEBSTER TOWNSHIP

Eric Petrovskis (Exec. Comm.)

W. BLOOMFIELD TOWNSHIP

Vacant

WHITE LAKE TOWNSHIP

Mike McAdams

CITY OF WIXOM

Michael Howell

VILLAGE OF WOLVERINE LAKE

James L. Donahue

CITY OF YPSILANTI

Edward Kluitenberg

YPSILANTI TOWNSHIP

Bob Neely (Exec. Comm.)
Jason Bibby

HRWC STAFF

Jo Latimore

Watershed Ecologist
jlatimore@hrwc.org

Joan Martin

Adopt-A-Stream Director
jmartin@hrwc.org

Suzu Morse

Planning Workshops Coordinator
suzymo@earthlink.net

Ellen Offen

Director of Development
eoffen@hrwc.org

Kris Olsson

Watershed Ecologist
kolsson@hrwc.org

Cynthia Radcliffe

Webmaster
webmaster@hrwc.org

Chris Riggs

Watershed Planner
cmriggs@hrwc.org

Elizabeth Riggs

Watershed Planner
eriggs@hrwc.org

Laura Rubin

Executive Director
lrubin@hrwc.org

Debi Weiker

Watershed Program Associate
dweiker@hrwc.org

Jennifer Wolf

Marketing Director
jwolf@hrwc.org

Susan Wooley

Office Manager
swooley@hrwc.org

Laura's "Stream" of Consciousness

An update on HRWC projects and activities

Here is what's happening in the Huron River Watershed:

NEW POLLUTION THREATS

New applications for private wastewater treatment plants discharging to the Huron continue to threaten its water quality. Due to the Lake Isabella court decision last year, the Michigan Department of Environmental Quality (MDEQ) can now accept permits for private wastewater treatment plants (WWTPs) without local municipal approval. As a result, we are seeing a rash of permit applications for shared wastewater treatment plants that would discharge to surface water and groundwater throughout the watershed. This action opens up large parcels of land outside of public sewer and water areas for large and intense development projects such as manufactured housing projects and subdivisions. Not only could these WWTPs place a great burden on the river, streams and groundwater of the Huron through additional pollution, but the decision also threatens local control for land use planning. We are bound to see more legislation or litigation on this issue.

MANAGING STORMWATER

In Livingston, Monroe, Washtenaw, and Wayne counties, HRWC is helping communities meet their Phase II stormwater requirements. Phase II of the implementation of the Clean Water Act requires urbanized communities to obtain permits for sending polluted stormwater to local

waters. In Livingston, Monroe and Wayne counties, HRWC is nearing completion of watershed management plans for the Huron Chain of Lakes and Lower Huron River subwatersheds. These plans lay out specific actions to be taken by each stakeholder group to protect and restore their subwatersheds. HRWC also is helping these communities with public education and outreach; for example, most of you will receive a 2006 calendar filled with tips on how you can take simple steps to protect the Huron (see page 4).

EVALUATING THE RIVER SYSTEM

'Tis the season: Lots of monitoring is happening throughout the Huron. With summer rainstorms and warmer temperatures, we have teams of volunteers out measuring habitat, macroinvertebrates, flow, channel shape, nutrients, and assessing stream characteristics at road stream crossings. When it pours we move into gear to get out there and take some measurements. It's fun — join us! (Contact Joan at jmartin@hrwc.org or (734) 769-5971.)

PRESERVING LAND

The City of Ann Arbor's Greenbelt Commission is reviewing farmland and open space applications for inclusion in the Greenbelt. Five farmland applications were submitted to the National Farm and Ranch Protection Program. This summer the Greenbelt Commission received word that all of them will get federal funds to help match and purchase the development

rights on these properties. Washtenaw County alone received 88% of the total federal funds awarded to Michigan. The Commission is now proposing an additional handful of parcels to Michigan's farmland protection program for more match funds. The protection of high quality farmland and open space is key to protecting the watershed from the additional burdens of high stormwater volume and polluted runoff associated with impervious surfaces.

DEFENDING THE NATURAL RIVERS ACT

We continue to aggressively uphold the Act. We have been working with the Michigan Department of Natural Resources (MDNR), the Washtenaw County Parks and Recreation Department, and the Huron Clinton Metropolitan Authority (HCMA) to come to an agreement on how to construct a Washtenaw County hike/bike path system along the Huron River without undermining the Natural Rivers Act. In question have been the numerous bridges proposed to crisscross the river. We have negotiated down to two bridges but still contend that only one is necessary for the path system. We continue to meet with all parties to find a solution that preserves the natural scenic beauty and ecological functions of the Huron River while providing ample recreational opportunities. We are waiting for the MDNR decision this fall on the two bridge permit applications.

— Laura Rubin

The Huron "Down on Main Street"

Huron River art is displayed in downtown Ann Arbor

HRWC sponsored this year's "Off the Wall" exhibition from June through August 2005 in partnership with the Ann Arbor Art Center. The exhibit consisted of banners created by local artists dealing with Huron River subject matter—the water, plants, animals, and landscapes that it evokes.

"Off the Wall" Gallery unites creativity and community by exhibiting original artwork banners on lampposts throughout Ann Arbor's downtown. During the summer, thousands of people had the opportunity to see these beautiful depictions of the

Huron as they shopped, dined, visited the Art Fairs or Green Fair, or just took a leisurely stroll through downtown. To make it possible for HRWC members to preview the banners before they hung from the lampposts, John and Ruth Langs graciously opened their lovely home and hosted an Art on the River Event in May. During the event, HRWC members purchased the banners before they were displayed in downtown Ann Arbor. Now that the exhibit has concluded the banners have safely made their way back to their new owners.

— Ellen Offen



"The Huron" by Ruth Langs
—photo:HRWC

The Whole Dam Story: It's Not Over Yet

Removal of the Mill Pond Dam is one step closer to reality

Since late 1999, HRWC has been working toward the removal of the Mill Pond Dam, located near the mouth of Mill Creek near the Village of Dexter. Slow but consistent progress was being made until this spring when we made a big leap forward.

WHO OWNS IT?

All potential dam removal stories have their own particular roadblocks and hang-ups. The Mill Pond Dam removal story became hung up on ownership. Thousands of dollars were spent to resolve the seemingly simple issue of who owns the dam and, therefore, who has the responsibility to maintain or remove it. There was no easy answer. Depending on the judge's mood, the fine details of the quit-claims, and the transfer of the property and the dam over the years, ownership rested either with Ford Motor Company, the Washtenaw County Road Commission, or the Village of Dexter. Of course, no one wanted to claim it for liability reasons.

REMOVAL IS THE ANSWER

In late 1999, with the help of HRWC, the Village of Dexter convened a Mill Creek Dam Task Force. Citizens and decision-makers in the Village of Dexter engaged in an 18-month process to research the costs and benefits associated with three different scenarios: full removal, partial removal, or repair and retention of the dam. After considerable research and consultation by ecologists, engineers and landscape planners, the task force recommended full removal of the Mill Pond Dam to the Village trustees who, in turn, voted in favor of that recommendation. The stakeholders involved in the situation, from the county road commission to the local residents, supported the recommendation and were ready to move forward.



GATHERING SUPPORT AND RESOURCES

HRWC took the next step and identified the required studies and potential funding sources for the dam removal project. HRWC held meetings with stakeholders and began to engage researchers, regulators, consultants, and volunteers in the process. HRWC and partners facilitated public visioning session that identified the aesthetics and uses preferred by residents to follow dam removal.

This spring the Washtenaw County Road Commission received about \$5 million in "critical bridge" funding from the State to reconstruct the failing bridge on top of the dam. HRWC convened a meeting in April 2005 with all interested stakeholders. Representatives from the Michigan Departments of Natural Resources and Environmental Quality, Trout Unlimited, County Commissioners, Dexter Village, Road Commission, and consultants attended. Those involved reported on the progress of the many studies and research required in the first phase of the dam's removal. The Road Commission detailed their process and stated that a scoping meeting for the environmental impact assessment for the bridge repair would happen in the next few months. The Road Commission also expressed their reluctance to take on the dam removal issue.

THE VILLAGE STEPS UP

In June, the Village of Dexter decided to take a leadership role and assume responsibility for the dam in order to move the dam removal issue forward. They hope to work closely with HRWC (which will contribute technical assistance and resources) and with the Road Commission



The Mill Pond impoundment and dam as it skirts the Village of Dexter
— aerial photo: Washtenaw County,

in order to avoid duplication of efforts on the bridge work. The Village of Dexter also hired a consultant to develop a preliminary action plan for the dam removal that will lay out the steps needed and potential costs. This action plan should be completed this fall.

HRWC's overall goal in this project is to secure removal of the Mill Pond Dam in order to restore the ecology of Mill Creek by reconnecting it to the Huron River, thus reestablishing a free-flowing river environment in the rural and urbanizing Mill Creek subwatershed. Studies have shown Mill Creek to have lower levels of biodiversity because the dam is a barrier to migration for fish, insects and other wildlife.

If you are interested in getting involved in the Mill Pond Dam removal process, please contact Laura at lrubin@hrwc.org or at (734) 769-5123 x2.

— Laura Rubin

Business Members

Thanks to these businesses for joining or renewing their memberships and helping to protect the Huron:

FRIEND

ECT, Inc.
Toyota Technical Center, U.S.A., Inc.

SUPPORTER

Beacon Investment Company

MEMBER

Fishbeck, Thompson, Carr & Huber, Inc.
Pollack Design Associates

Fall Birthday Festivities are More than Just Cake

HRWC 40th anniversary celebration events

We've blown out the candles and cut up the cake (it was delicious!), but the festivities aren't over yet! To celebrate 40 years of protecting the Huron, we invite you to attend the following free events, (including more birthday cake!)

View the Huron River Watershed through photo art — Sept. 17 to Oct. 30 at the Malletts Creek Branch Library in Ann Arbor. Enjoy an exhibit of noted photographer Marc Akemann's beautiful pictures of the Huron River Watershed in the Livingston/Washtenaw County area.

Birding — Sunday, Sept. 25, 9:00 AM at Kensington Metropark's Nature Center. Join Huron-Clinton Metropark Naturalist Bob Hotaling for a bird walk. Please bring binoculars if you have them. Bob will provide checklists for park birds. There is a vehicle access charge of \$4.

Canoe & Cider on the Huron — Sunday, Sept. 25, 1:00 PM at Hudson Mills Metropark. Enjoy a guided fall canoe trip on a portion of the Huron's beautiful Natural River Zone from Hudson Mills Metropark to Delhi

Metropark with a stop at the historic Dexter Cider Mill for fresh cider and donuts. For reservations, please contact Ellen at (734) 769-5123 x1 or eoffen@hrwc.org.

Authors on the Huron— Thursday, Sept. 29, 7-8:30 PM at the Malletts Creek Branch Library in Ann Arbor.

Prominent local authors will read selections of their works highlighting the Huron and other rivers. Authors include John Knott, Keith Taylor, Alison Swan, Craig Holden and poets Linda Gregerson and Dargie Anderson.

Music on the Huron—Sunday, Oct. 9, 3:00 PM at Riverside Park in Ypsilanti.

Join us for a wonderful Sunday afternoon of sitting by the Huron in Ypsilanti's Riverside Park and listening to local legends of bluegrass, the RFD Boys. Enjoy their fabulous musicianship and humor. There will also be a surprise performance and the possibility of a Riverside Arts Center tour.

Music on the Huron—Sunday, Oct. 16, 2:00 PM at Nichols Arboretum in Ann Arbor.

Bring a blanket or a lawn chair to the Nichols Arboretum amphitheater near the Huron in Ann Arbor to enjoy an acoustic

concert featuring local bluegrass favorites, the Raisin Pickers. Listen to the fiddle, banjo, guitar, mandolin and string bass play in a magnificent setting.

History of the Huron — Thursday, Oct. 20, 7-8:30 PM at the Malletts Creek Branch Library in Ann Arbor.

Prominent local historian Grace Shackman will talk about life along the Huron during the 19th and 20th centuries.

Huron River Watershed Council Open House — Wednesday, Nov. 2, 3-5:00 PM at the NEW Center, 1100 N. Main St., Ann Arbor.

The Huron River Watershed Council invites everyone to visit our offices, meet the staff, and have a piece of cake.

Special thanks to WEMU for their media sponsorship of these events!



The Huron River Watershed Council

The Huron River Watershed Council is a coalition of Huron Valley individuals, businesses and local governments established in 1965 under Michigan's Local River Management Act to inspire attitudes, behaviors, and economies that protect, rehabilitate, and sustain the Huron River system. The Watershed Council is a non-profit organization under section 501(c)(3) of the federal tax code.

If you enjoy this newsletter, please consider membership. Services of the Council include hands-on citizen education, technical assistance in policy development and direct river protection projects. You will find a membership form below. All contributions are tax deductible.

Yes, I want to help the Huron River Watershed Council protect and restore the Huron River.
 Here are my 2005 member dues, mailed to: Huron River Watershed Council
 1100 N. Main St.
 Ann Arbor, MI 48104

<input type="checkbox"/> \$5,000 Mink	<input type="checkbox"/> \$500 Blue Heron	<input type="checkbox"/> \$50 Friend
<input type="checkbox"/> \$2,500 Smallmouth Bass	<input type="checkbox"/> \$250 Mayfly	<input type="checkbox"/> \$30 Supporting
<input type="checkbox"/> \$1,000 Green Heron	<input type="checkbox"/> \$100 Steward	<input type="checkbox"/> \$___ Other

Name _____
 Address _____ City, State _____ Zip _____
 Phone _____ Email _____

The Huron River Watershed Council
1100 N. Main St., Suite 210
Ann Arbor, MI 48104
(734) 769-5123
www.hrwc.org

NONPROFIT
U.S. POSTAGE
PAID
Ann Arbor, MI
Permit #435

Please examine your mailing label for your HRWC membership expiration date and use that as a reminder to renew. If there is no date, then you may not be a current member of the Watershed Council. Please consider HRWC membership. We need your support. Thanks.

The Huron River Watershed Council receives contributions via payroll deduction through EARTH SHARE of Michigan.



Thanks to Our Supporters!

Protecting the Huron is a big job and we would be lost without the donations of time, talents, and resources from our dedicated volunteers and supporters. **We extend Special Thanks to:**

The very talented **Dave Brooks** for numerous jobs, including measuring whatever needs to be measured, making things work and leading people to obscure sites.

Thomas A. Edsall, Rajeev Jain, Lynn Berni, Liz Callaway, Barb & James Chamness, Katie Davison, Marcia Dorsey, Dee Drake, Marilyn Edington, Neal Foster, Dora Passino-Reader, Margaret Steiner and Norma Jean Wade for helping us be effective in the Millers Creek neighborhoods.

Fraleighs, Lodi Farms, Margolis, Plymouth, Turner, and WildType Nurseries for providing trees at reduced cost to Millers Creek residents as part of the Millers Creek Watershed Improvement Project

Forty people who trained and 30 who offered to help the teams to map and measure physical conditions of our Adopt-A-Stream sites.

Doris Terwilliger for competently filing our new library books and exercising patience with our unconventional cataloging methods

Dave Wilson and the **15 volunteers** (mostly members of the **Mill Creek Research Council**) for their excellent work on the Mill Creek watershed sediment project. They have already logged in nearly 100 data sets!

Dave Brooks, Donald Chung, Margaret Doub, Ramo James, Kevin Hartgerink, Noemi Barabas, Zoltan Jung, and Don Rottiers for continuing to download our transducers.

Noemi & Maryanna Barabas, Michael Benham, Dave Brooks, Margaret Doub, Gary Hochgraf, Zoltan Jung, John Lillie, Don Rottiers, Dave Wilson and Don Wyche for measuring flow when the need arose and the water rose.

Meg Kennedy Shaw who took charge of the new member "welcome packets."