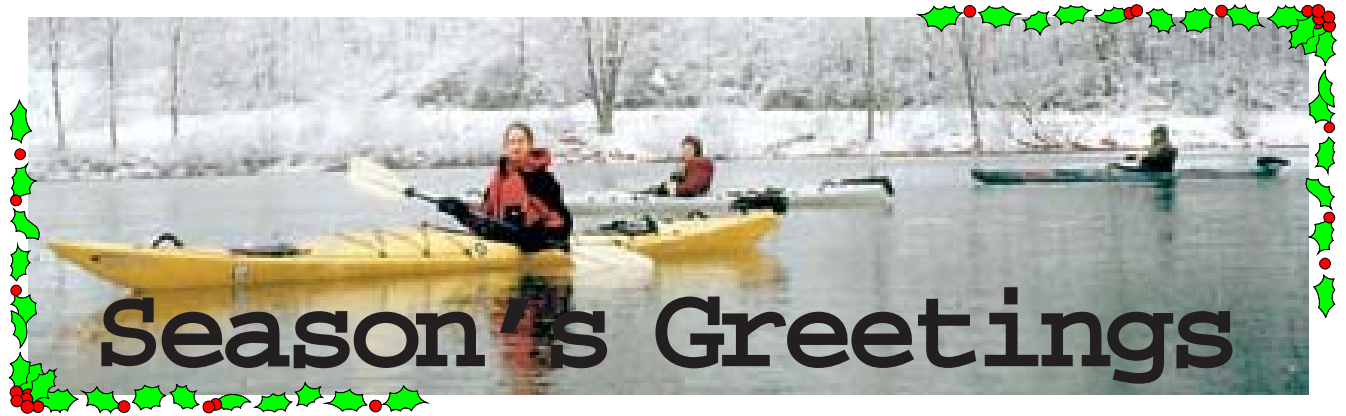


# G.R.E.A.T.

## Grand River Environmental Action Team

P.O. Box 223, Jackson, Michigan 49204

[www.great-mi.org](http://www.great-mi.org)



## Jackson County Parks Association Joins GREAT for Lime Lake Cleanup

**W**ith a battle plan that would have impressed General Patton himself, forty-three friends of the environment moved out in different directions to remove trash from Lime Lake County Park. Todd Zeller, GREAT's rivermaster led a group along the Falling Water Trail. Ken Dodge, led a flotilla of canoes around the north shore. Bryon Ennis led a group around the south shore, and Joe Jaworski headed straight east across Lime Lake for a frontal assault on the Lime Lake fen (See related articles in this newsletter on fens and bogs). When all three groups met in a WWII-like pincer move, they had picked up a dumpster full of odd debris, thirteen tires, and approximately 300 pounds of scrap metal.

Before the volunteers headed out on their garbage forays, Spring Arbor University biology professor Joe Jaworski provided information on the flora and fauna found in the vicinity. Most notable in professor Jaworski's preliminary talk were visual illustrations of Massasauga rattlesnakes and poison sumac. According to Jaworski, participants were quite likely to encounter poison sumac

which he warned should be avoided. As for the Massasaugas, though he cautioned workers to be careful lifting up large flat pieces of debris, he lamented that we would probably not encounter this reptile, since they have historically been persecuted unmercifully. Along with the factual information professor Jaworski provided for participants, he also regaled his listeners with the sort of irreverent and funny tales that have come to be known as "vintage Jaworski" story craft.

When the volunteers returned from their battles with debris, they were treated to a hearty luncheon prepared by the Jackson County Parks Association (an all-volunteer group of citizens who promote and protect Jackson County Parks). By this time the sun had broken through and it turned out to be a beautiful September afternoon. Todd Zeller had predicted to the GREAT board during planning sessions that this would probably be the most enjoyable clean-up we would experience. Judging by the number of volunteers who lingered over lunch and enjoyed each other's conversation, he was right. (See photos on pages 2 and 3.)

## From the Clean-up Photo Album

Joe Jaworski holds a non-poisonous species of sumac while explaining the features of poison sumac.



Regis Klingler pulls debris from the shallows along the shore of Lime Lake.



Looking like an ancient garbage scow, one of GREAT's battered canoes prepares to haul trash to the county park staging site.

Carol Badgely empties muck from a bottle before placing it in the canoe.



**Below:** Carol Scott displays a rubber chicken (a hunter's decoy???) taken from the shore of Lime Lake.

**Bottom:** Joe Jaworski holds a jar containing a pickled massasauga rattler for the edification of clean-up participants.



## Bog



## Fen



**A** bog is a standing body of water with no underground spring of fresh water to feed it. The water is generally cold, extremely acidic and low in oxygen. A form of moss, especially Sphagnum moss, grows and forms a thick mat of floating plants. These plants, over time, can fill in the pond or small lake with peat that will eventually be firm enough to support trees.

The stages in bog development are divided up by a series of circles that can be easily identified as you look out over a bog. In the middle of the bog is an area of open water. Around that is a mat of Sphagnum moss and other plants that are so thick in spots a person can walk on top of the mat without falling into the water. The whole mat moves up and down. As a result, they are sometimes called “quaking bogs”. The outside circle is made up of tall shrubs that give way to a forest of tamaracks or other trees.

Bogs have very little decomposition of organic matter creating a very acidic soil. In this nutrient-poor soil, some plants have adapted by becoming carnivorous. Examples include Venus flytraps and pitcher plants. These plants trap insects to supplement their photosynthetic diets.

**F**ens are wetlands characterized by continuous sources of ground water rich in magnesium and calcium. This groundwater comes from glaciers that have melted, depositing their water in layers of gravel and sand. The water sits upon layers of soil (glacial drift) that are not permeable; thus keeping the water from sinking beneath the surface. The water is then forced to flow sideways along the surface, where it picks up minerals in its path that contribute to the special chemical make-up of fens.

Sometimes, there are so many minerals in the water that some of them congregate to make a very porous rock called tufa. Marl, a crumbly kind of rock, can also accumulate from excess calcium mixed with other kinds of minerals. The soil in a fen is made up of peat.

The exact make-up of a fen is decided not only by the concentration of minerals, but also by the amount of water flow, and by the terrain itself. It is different from a bog. Where a bog is more acidic, a fen is very alkaline. The pH of soil in a fen ranges from 7.35 to 8.00. The species of organisms that survive in fens must be able to adapt to these alkaline conditions present in the fens.

Information from:

[www.twingroves.district96.k12.il.us/Wetlands](http://www.twingroves.district96.k12.il.us/Wetlands)

# GREAT Web Site

By Jim Seitz

Our members and the general public can access information about the GREAT organization and its events at <http://www.great-mi.org>.

Many find the Calendar of GREAT's events for the year to be very useful. The dates, locations, and other information about the Annual Meeting, seasonal monthly canoe trips, and the annual clean-up are all posted. Also, there is a section of links for maps of the Jackson County area Grand River Canoe Trails starting with the Headwaters to the Tompkins Road DNR Access. A Flora and Fauna link goes to a detailed list of birds, animals, and wild plants which have been identified on various canoe outings on the Grand River.

Soon, the current and previous issues of the GREAT Newsletters will be posted in pdf format (Adobe Acrobat Reader) which can be read on screen or downloaded. Links will be created for archived issues of previous years. A membership link, has a form for joining and renewing GREAT memberships.

At bottom of the home page, is basic contact information for GREAT officers and the organization. Finally, there is Directory of Related Links which has web links to public and private environmental and canoeing sites.

The present GREAT site was created and maintained by GREAT president, Chuck McKeown. Board member, Jim Seitz has recently taken over the responsibilities as the new web master. The design and content of the present site is under review. Please contact Jim ([seitz.jim@gmail.com](mailto:seitz.jim@gmail.com)) if you have any comments or suggestions.



# Smooth Sailing for Paddlers on October Outing

By Ken Dodge and Jeff Grund

Fifteen participants in the October GREAT paddle outing welcomed exceptional fall weather for their outing which began at the Vineyard Lake County Park and ended at the old power plant on the Raisin River. In order to be as safe as possible the party of canoes and kayaks hugged the shore of Vinyard Lake as they sailed toward Little Vineyard and its outlet, the Raisin River. At the outlet of the lakes the party encountered a water level control dam. Most of the paddlers disembarked from their boats and portaged the short distance to the Raisin River, however one daring kayaker paddled over the dam and came down safe and dry in the river.

Kim Dysinger, a new member of GREAT on her second outing with the group was particularly conscious of the many beautiful shades of browns illuminated by the clear autumn sunlight, and the clarity of the water in Vineyard Lake. Kim remembered, "At one point on the trip, leaders Ken Dodge and Jeff Grund encouraged my canoe partner Barb Anderson and I to go ahead of them so we could see the wood ducks, and we did see about ten or twelve of them. It was a beautiful and fairly easy paddle, and I enjoyed the leisurely picnic and conversation afterwards," Kim concluded.



Wood Duck

## They Own a Piece of the Esker And a Beautiful Stretch of the Grand River Too

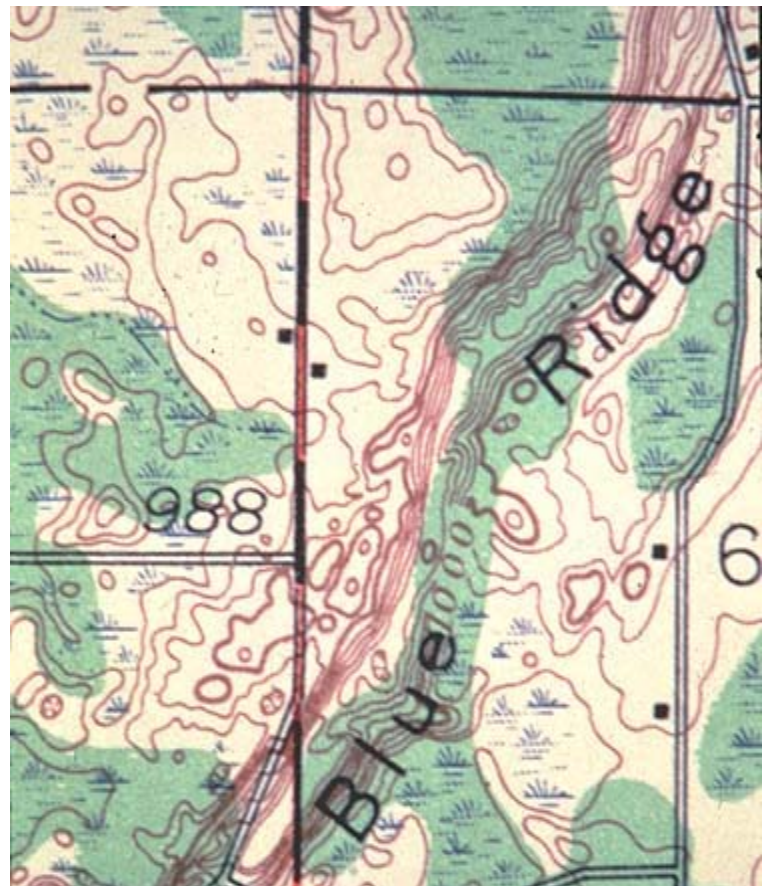
By Bryon Ennis

Driving south of Jackson on U.S. 127 you crest a gentle hill near the entrance to Liberty Landfill. This rise is the result of deposits left by an enormous river coursing through a glacier that covered Jackson County thousands of years ago. Glacial till deposited in this manner is called an esker, and this particular esker is named the Blue Ridge. Jackson is fortunate that James and Marie Smith own a portion of the Blue Ridge Esker because they are protecting a resource which is said to be more valuable than gold—gravel.

On a fall day recently James Smith took me on a tour of their centennial farm on Whetherby Road. Though he and Marie have only lived on the farm since 1956, it has been in the Smith family since the 1840s. The farm next door, originally owned by the Tuthill family, relatives of the Smiths, predates Michigan's statehood of 1839. Now in their eighties, James and Marie are unable to farm the land themselves, but lease out the tillable fields to crop farming, and the wooded land to hunting groups.

During my tour, James and I crisscrossed the mile or so of pristine Grand River which flows through their property. He has maintained by yearly mowing, a three-acre field along the banks of the Grand where Potowatomie Indians lived for generations. James showed pictures attesting to the vast collection of Indian artifacts recovered from this field as it was plowed each spring. Unfortunately, James said, this superb collection was broken up among his siblings when his parents died.

Another interesting feature standing deep in the interior of the farm is an ancient tulip tree. James recalls when he was still a young man this tree was struck by lightning taking its majestic top right off. Jim figured that was the end for this monarch of the forest, but nearly fifty years later, that tree still lives and provides habitat for several species of mammals and birds. As for the Blue Ridge Esker, James is concerned that when he and Marie are gone, commercial interests will gradually whittle away what is left of this notable geological feature.





**Left:** James Smith pauses on his bridge over the Grand River.

**Lower left:** Knot stick used by Potowatomis to mark their preferred river crossing.

**Below:** Smith stands in front of ancient tulip tree whose canopy was removed by lightning in 1954.



## GREAT Board Members

Chuck McKeown  
President

Bryon Ennis  
Vice President

Todd Zeller  
Rivermaster

Nancy Lapinski  
Membership Secretary

Ken Dodge  
Treasurer

Trustees:  
Bill Bivens  
John Hand  
Warren Renando  
Jim Seitz  
Bill Sonnet

Jeff Grund  
Recording Secretary

Jeff Grund  
Accountant

Betty Desbiens  
Historian

Louise Hefka  
Bookkeeper

The GREAT board meets on the second Wednesday of each month, at 7:00 p.m. at the Summit Township Hall, 2121 Ferguson Road. Meetings are open and visitors are welcome. If you would like to have an item placed on the agenda, please notify Nancy Lapinski at 783-3661.

GREAT,  
P.O. Box 223  
Jackson MI 49204

The GREAT Newsletter editor is Bryon Ennis.  
amy.ennis@sbcglobal.net

### New Members

GREAT welcomes the following new members:

T.E. Schaffner  
Kim Dysinger  
Gratia Karmes

### Next Board Meeting

The GREAT Board will meet on January 10 at 7:00 p.m. at the Summit Township Municipal Building.

### Notice

The 2007 Annual Meeting of GREAT will be held during the first week of March. Watch for the date and location in the next newsletter. All members of GREAT are encouraged to attend this meeting.

### Do You Have Space for GREAT?

Over the years GREAT has accumulated a considerable amount of equipment for river travel and clean-ups. Previously, GREAT president Charles McKeown stored much of the equipment in a barn on his property, but he has recently changed residences. Rivermaster Todd Zeller has accepted most of the equipment temporarily, but it has severely crowded his garage. If you can help GREAT by providing some storage space, you can receive a generous tax deduction in lieu of rent. Contact Bryon Ennis at 750-1476 or send a note in the mail to GREAT, PO Box 223, Jackson, MI 49201.

GREAT's fiscal year runs from January 1 through December 31. Your dues is a tax-deductible contribution as are other donations to GREAT.

Name \_\_\_\_\_

\_\_\_\_\_ GREAT Membership \$15.00

Street Address \_\_\_\_\_

\_\_\_\_\_ ACA(American Canoe Association)  
membership \$30.00. Dual Membership is \$45.00

City \_\_\_\_\_

ZIP \_\_\_\_\_ State \_\_\_\_\_

Make checks for \$15 or \$45 payable to:  
GREAT  
P.O. Box 223  
Jackson MI 49204

Telephone \_\_\_\_\_