Friends of the Platte River, Inc.

Summer *2007*

A group that exists to serve as a forum to address issues affecting the Platte/Little Platte River watershed and to seek impartial solutions that restore, enhance, and protect this valuable resource

The Watershed

The Platte/Little Platte watershed is located in the southwest corner of the state of Wisconsin. It covers over 350 square miles of land and is roughly bounded by the municipalities of Potosi/Tennyson, Lancaster, Fennimore, Montfort, Livingston, Cuba City, Dickeyville, and the Mississippi River and includes the city of Platteville.

The Board of Directors Welcome!

In March 2007 The Friends of the Platte River held our first annual meeting and elections. Thanks to those who have volunteered their time and talents serving in board positions. The following slate was elected to the board of directors:

Daniel Enz-President—Dan has a Masters Degree in civil engineering and has worked for 12 years in the civil engineering field. Daniel is currently enrolled in a Ph.D. program in civil engineering. His duties include recruiting members, organizing and facilitating meetings, and conducting research regarding river restoration and revitalization. Dan along with his wife and two children own a home along the Platte River.

Bob Donald-Vice President— Bob and his wife Debbi graduated from UW-Platteville in 1976 and decided to make Southwest Wisconsin their home. They live in an old rock house along the Platte River, which they are in the process of renovating. In 1986 they bought a large tract of land adjacent to the house. The land had been farmed for over 150 years but they now have most of the land in CRP and have planted over 30,000 trees and a native grassland prairie. Bob spends most of his time maintaining/improving the property. Bob is also interested in viticulture and enology and has a small vineyard and makes wine from the grapes.

Bill Brewer-Secretary— Bill grew up in Dubuque, Iowa and has spent many hours on the Mississippi River. Bill and Gina Brewer have a house on West Lane on the Platte

2007 Board of Director Meeting Dates

June 9, 2007*
September 8, 2007
December 1, 2007

All meetings will be held Saturday mornings, 9:00 am at the Dickeyville Community Center unless noted otherwise.

*Unless it's raining, the June meeting will be held at Banfield Bridge Recreation Area for an outdoor field trip.

River. He is a shareholder in the firm of McEnroe, Gotsdiner, Brewer, Burdette & Steinbach, P.C. located in West Des Moines, Iowa. He has donated many hours setting up the Friends of the Platte River corporation and preparing the appropriate filings for the organization. He also attends and facilitates meetings.

Everett Malott-Treasurer—Everett and his wife Margie have owned property along the Platte River for the past fifteen years. His hobbies are hunting, fishing, canoeing, and gardening. Everett and his wife have four children and eleven grandchildren. Everett is a diehard Packers fan and enjoys supporting his grandsons at wrestling meets. He has been actively involved in attending Friends of the Platte River meetings and active in publicizing the mission of the group.

Tammy Enz-Executive Director—Tammy is currently employed by Southwest Badger Resource Conservation & Development as coordinator with the Platte River Watershed Project. She has a degree in civil engineering and has been instrumental in securing two grants for the Friends of the Platte River. Her duties include administration of the group, organizing and facilitating meetings, relations with other organizations, and exploring and applying for grant opportunities. Tammy grew up in Platteville. Her family has lived along the Platte River for many generations.

Pat Schaal- Pat grew up on the Platte River. His father was a commercial fisherman so he spent much of his life on the river. Pat remembers when the river had many uses including an excellent recreational area. He and his wife plan to retire on the Platte River and are very supportive of measures which will increase the usability and beauty of the River.

Half this board of directors will be serving a one year term and the other half a two year term. There will be opportunity to expand the board in next year's election.

Project Update

On April 14, 2007 the Friends of the Platte River held a river clean-up/canoe assessment work day, "Paddle on the Platte." Students from the University of Wisconsin-Platteville and local citizens

paddled the entire navigable section of the Platte River, from Ellenboro to the Mississippi River, noting impasses in the river for future workdays on the river. Volunteers also collected trash along the canoe access points. Use of equipment and canoes was donated by local business, *St. John's Mine and Canoe Rental* and by the University of Wisconsin-Platteville. The canoe trail project is sponsored by a funds received in conjunction with UW-Extension staff.

Planning is underway for another canoe trail workday this summer…watch for more information.

Student Ambassador

A student ambassador position was filled by student, Brian Rogers, from the University of Wisconsin-Platteville. The student ambassador will help coordinate and facilitate a relationship with university students on future projects in the Platte River Watershed.

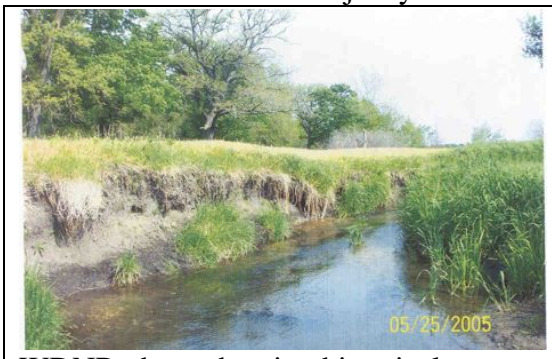
History of the Platte River

One important goal for the Friends of the Platte River, Inc. is to gather information about the Platte River watershed, its history, and current trends which affect the river.

A major factor that led to the initial formation of the Friends of the Platte River group was the prevalence of silt and sediment accumulating near the mouth of river in recent years which fills in pools and deposits nutrients which contribute to excessive vegetation and algae blooms. Historically this area has been known for deep waters adequate for boating and other recreational activities. ("The waters of the Platte River system were sufficiently deep in the 1830s and 1840s to permit steamboats to travel the lower reaches of the river and to allow keel boats to carry cargo up the Platte and Little Platte tributaries...downstream of about mile thirty-seven (km 60) the stream was 100 or more feet (30m) wide in the 1830s, but it is only 40to 50 feet (12m-15m) wide today" (Knox, 1977)).

In order to discover the source of this particular concern in the lower Platte River, trends throughout the watershed need to be explored. University of Wisconsin geography professor, James C. Knox has studied the history of the Platte River and has written papers on the geological history of the Platte River and other river systems in Southwestern Wisconsin and the Upper Mississippi River Valley. Much of his focus is on the human impacts to the streams in this geographic region. Understanding the history of the Platte River is fundamental as the group begins working toward setting specific goals and courses of actions to improve the river.

Two distinct historical events significantly changed the hydrologic system of the Platte River and contributed to the current state of the river system. The first significant event was early European settlement and subsequent conversion of land to agricultural use. Dr. Knox writes that "the conversion of land from a natural covering of prairie and forest in the early 1830s to fields and pastures of the present has been responsible for a major metamorphosis of stream channels" (Knox, 1977). Knox states that at the time of an original land survey in the early 1830s, "The Platte River watershed was approximately seventy percent forested and thirty percent prairie"(Knox, 1977). The watershed is now predominately agricultural land. It was the initial conversion from forests and prairies to agricultural uses which contributed the majority of sediment to the river system. Dr. Knox describes the period of time from the 1870s-1940s as a period of maximum disturbance after which time soil loss contributing to sedimentation in streams has moderated due to the introduction of conservation practices on agricultural land. Many of these positive conservation practices and trends were discussed on our May 19, 2007 watershed tour.



WDNR photo showing historical stream bank sedimentation

As conservation has increased throughout Southwestern Wisconsin, streams "are moving closer to flow conditions that existed at the beginning of European settlement in the basin."(WDNR) This is evidenced through increased base flows and decreased flood peaks in basin streams. There is also evidence that fish populations

have improved. However, lower segments of the Platte River are seemingly seeing an increase in sedimentation.

Dr. Knox addresses this phenomenon in a current study of the influences of tributaries to the Upper Mississippi River, including the Platte River. He states that "much of the sediment eroded from upland sites during the historical period of Euro-American agriculture is presently stored elsewhere in the drainage systems, including fence rows, lower hill slopes, alluvial fans, and floodplains"(Knox, 2006). In writing about the reach of the Platte River from its confluence with the Mississippi River to about six miles upstream on the Platte, Dr. Knox explains that, "the very low gradient of this reach and the effects of backwaters from the Mississippi River…have caused extreme magnitudes of historical sedimentation on the flood plain and channel margins. The backwater effects undoubtedly were increased greatly after the installation of Lock and Dam No. 11 on the Mississippi River at Dubuque, Iowa in the early 1930s"(Knox, 1977).

In addition to the installation of the downstream dam which raised the water level at the mouth of the Platte River 10-15 feet (3m-4.5m) and created a pool/impoundment in the lower reaches of the river with low gradient and low velocities, the altered stream channels feeding into the lower system have contributed to anomalously high rates of sedimentation in the lower portion of the river. Much of the eroded soil from the historical settlement period remains along streams throughout the watershed, forming high stream banks which efficiently channel large flows of water, along with historical sediment and soil associated with current run-off events to the mouth of the river. Because of the channel shape and high banks, most of the sediment is not deposited along the stream banks in the upper portions of the watershed and is instead carried to nearer the mouth of the river where low gradients and low velocities coupled with backwater effects from the Mississippi allow the sediment to drop out at a considerable rate.

It is easy to see how each part of the Platte River watershed system affects other portions of the watershed and why a watershed approach is the best way to approach river concerns. There are many components to solving the issues of sedimentation and hydrologic disturbances in the Platte River watershed.

Continuing to employ and improve the effective land conservation strategies which have been successful in reducing soil loss and improving stream health is critical. In addition, the Friends of the Platte River will explore other restorative measures which will compensate for the altered hydrology of the river. The friends group is currently partnering with the University of Wisconsin civil engineering department to model sedimentation in the Platte River as a basis for future work.

Resources:

Knox, James C., 2006. Floodplain Sedimentation in the Upper Mississippi Valley: Natural versus human accelerated. Geomorphology 79.

Knox, James C. , 1977. Human Impacts on Wisconsin Stream Channels. Annuals of the Association of American Geographers 67.

Wisconsin Department of Natural Resources. 2001. The State of the Grant, Platte, & Galena River Basins. Madison, WI. PUBL-WT-660-2001.

Watershed Tour News

Over a dozen people participated in our May 19 watershed tour and had the opportunity to get to know the Platte River watershed and to learn about measures that can be taken on land and in the water to ensure high quality waters throughout the watershed.
The tour included a fish shocking demonstration hosted by the Wisconsin DNR.

A big thanks goes out to all the folks who shared their knowledge on the tour: Bradd Sims and Jim Amrhein, *WDNR*, Steven Bertjens, *USDA*, Kevin Lange, *Grant County Land Conservation*, David Wilson, *Driftless Area Initiative*, Mark Sethne, *UWP geology*.

Bradd Sims, Jim Amrhein, Steve Bertjens fish shocking at Blockhouse Creek

A portion of the tour included visiting several farms in the watershed where farmers are employing conservation measures which result in less soil erosion and cleaner streams and rivers.

The following is a list of some of the conservation features observed:

Contour Strip-Cropping: Planting crops along the contour of the hillside prevents soil from running down the hillside and entering streams when it rains. Rows of alfalfa and other perennials catch the soil as it moves down the hillside from other more erodible crops.

No-Till Cropping: By not plowing the crop residue into the soil after harvest, it is left on the fields to hold soil in place to prevent rain from washing it into streams. Crop residues help protect the soil surface from the impact of a raindrop so the soil particles do not dislodge and erode. No-till farming increases soil organic matter which increases soil tilth, a major factor in determining whether rain will infiltrate or run-off. Next season's crops can be planted through the crop residue. The more a field is plowed, the more organic mater is
lost, thus the potential for soil erosion and sedimentation is increased.

Barnyard System: Concrete walls around a barnyard prevent barnyard runoff from entering streams and rivers by containing the manure when it rains. Screens and a grass filter are used with the system to ensure that the barnyard waste filters properly instead of running unfiltered into streams.

Dam: An earthen dam is constructed to stabilize an area where a gulley is causing significant soil erosion. Dams hold back runoff water from storm events and trap up to 70% of the sediment that enters the structure.

Stream stabilization: Large rocks are placed along the stream bank and in the toe of the stream to prevent banks from eroding and sloughing.

The tour also included a visit to the Grant County wetland near Hwy 61 where the group learned more about the importance of wetlands in the river system and about ways any citizen of the watershed can help improve and maintain clean waters in the Platte River watershed.

Wetlands are an important part of the watershed because they slow down the flow of surface water, reducing the severity of floods. Wetlands act like a big filter,

removing sediment and contaminants form the surface water before it moves downstream into larger rivers and lakes. Wetlands also provide food and shelter for many fish and waterfowl.

Anyone in the watershed can protect streams by planting a rain garden, a low garden designed to collect rainwater during storms and slowly filter water into the ground. People who have a river or stream running through their property can leave a buffer strip of un-mown grass or plants along the stream to catch nutrients and runoff from their yards.

This wetland area of the watershed is historically significant as it was once the general location of the city of Paris, an early settlement founded by a Frenchman. Paris Township derives its name from this ghost town.

To the delight of all, multiple species of fish…and a snake…were collected from Blockhouse Creek during the fish shocking demonstration. The unique features of each of the species where demonstrated and the young Friends in the group had an opportunity to get up close and personal with our aquatic neighbors. Blockhouse Creek is known for its smallmouth bass population. Over seventeen other species of fish are known to populate this stretch of the creek.

Join

Your investment in the Friends of the Platte River, Inc. allows you the right to help determine actions for the group, receive newsletters, updates, and invitations to educational events.

Your membership supports the very important mission of the group and insures that we will be able to continue applying for and receiving funding to work toward continued improvements in the watershed.
Thank You!

Membership Form

Sign up for:

*Student*_____	*$10.00*
*Individual*_____	*$20.00*
Family _____	*$35.00*
*Municipality*_____	*$50.00*
*Organization/Business*___	*$50.00*
*Add'l donation*_____	_____
Total	_____

*Name*_____
*Address*_____
_____
*Phone*_____
*Email*_____

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