



Yellow Breeches Watershed Association
c/o Lower Allen Township Authority
120 Limekiln Road, New Cumberland, PA 17070-2428

www.ybwa.org

September 2006

NEWSLETTER

Volume No. 6 Issue #2

Dickinson College Students Study Mountain Creek

During the spring semester of 2006, three Dickinson College students (Matthew Freedman, Kimberly Ogren, and Abigail Snyder) did a research study on Mountain Creek, under the supervision of Professor Candie Wilderman. The students chose Mountain Creek as their study area because of its rather small size (matching the size of the class!), the relative lack of good current scientific information on the stream, the fact that Mountain Creek represents one of the few forested and largely unimpacted watersheds in Cumberland County, and the stream's importance to local communities and to the Yellow Breeches.

After doing a reconnaissance of the watershed, the three students decided to focus on two possibly impacted reaches of the creek: 1) the headwater area in the Michaux State Forest, which is impacted by acidic deposition, and 2) the downstream reach that surrounds the permitted discharge of Land O Lakes. For the headwater portion, students chose to sample Dead Woman's Hollow, to help assess the efficacy of the lime sand mitigation project recently started there by the Cumberland Valley Trout Unlimited. Students also chose a reference site, near Fuller Lake in Pine Grove Furnace State Park.

For their assessment students studied water chemistry, habitat, macroinvertebrate communities, and diatom communities. Field sampling was done from February 15 to March 29, 2006.

Dead Woman's Hollow

The low alkalinity concentrations and low pH, the absence of acid-sensitive Ephemeroptera (mayfly



Students collect macroinvertebrates from Mountain Creek (l to r: Abby Snyder, Kim Ogren and Professor Candie Wildeman – photo by Matt Freedman)

nymphs), overall low macroinvertebrate metric scores, and the abundance of acid-loving diatoms at Dead Woman's Hollow indicate that the headwaters are indeed acidified. There was little difference between sites located upstream and downstream from the lime sand mitigation project, indicating that the liming project is not currently achieving its goal of mitigation.

Land O Lakes

At Land O Lakes, a variety of chemical parameters, such as nitrates, alkalinity, dissolved solids, and temperature showed elevated concentrations at the outfall, with continued higher concentrations at the site 50 meters downstream from the discharge pipe. Macroinvertebrate communities also showed

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YBWA 2006 Calendar of Events

September 23

Forever Wild Concert Event at
Mechanicsburg Middle School

October 24

Annual YBWA Membership Meeting

December 13

YBWA Board Meeting

You're Invited to YBWA's 5th Birthday



Who: Yellow Breeches
Watershed Association
members, families,
friends and guests

What: Yellow Breeches
Watershed Association
5th Year Anniversary
Celebration and Annual
Membership Meeting

When: **Tuesday October 24th**
Picnic at 6:00 PM (food
& drinks provided)
Annual membership
meeting 7:00 PM

Where: Lower Allen
Township Community
Park Barn – Lisburn,

*First 70 members in attendance
will receive a gift in commemora-
tion of YBWA's 5th Year Anniver-
sary.*

**RSVP to John Eby by 10-20-06;
email [john_eby@lower-
allen.pa.us](mailto:john_eby@lower-
allen.pa.us); work phone 717-
975-7575 x 1102**

PRESIDENT'S MESSAGE

As the 5th Year Anniversary of the Yellow Breeches Watershed Association continues, there is much to celebrate. Since the last newsletter in March, work on the Yellow Breeches Water Trail project continues (see related article), volunteers braved the cold and rain to participate at a successful stream cleanup event on April 8th, another successful Trout Day was held on Opening Day (Thank You United Water), a presentation to the Canoe Club of Greater Harrisburg, acquired and completed the YBWA table top exhibit (Thank You CCCD & PACD) and displayed it at several events including the Chesapeake Bay Foundation Watershed Expo, the Yellow Breeches Creek was listed on the PA Rivers Conservation Registry on May 20th, the total number of members in YBWA has increased, supported several project initiatives in the watershed related to stream restoration and public access/use, participated in Expedition Susquehanna – currently working with a local student on a project, and YBWA will participate and exhibit at the Forever Wild Concert event on September 23rd.

A big thank you to everyone who volunteered their time to support YBWA this past year! We continue to look for new members and for more members to become actively involved with committees and other organization events and activities. If you have a particular interest, please let it be known and get involved. Also, if you know of someone who is not a member but might be interested, please consider inviting them to become a new member of YBWA. With your help, YBWA will continue to grow and be able accomplish even more for the benefit of the Yellow Breeches Watershed.

I look forward to seeing you at the annual membership meeting on October 24th !

Since this will be my last President's Message, I want to say thank you for giving me the opportunity to serve as President for the past two years. It has been challenging but very rewarding to see the progress that we continue to make as an organization. On behalf of YBWA, I ask for your continued support of the organization and look forward to even greater accomplishments for YBWA in the years to come.

*Rich Pugh
President YBWA*

Projects Now Eligible for Funding

Yellow Breeches River Conservation Plan Approved

The Department of Conservation & Natural Resources has approved the Yellow Breeches Rivers Conservation Plan, thereby placing the Yellow Breeches watershed (from the headwaters to its confluence with the Susquehanna River—219 square miles in Adams, Cumberland and York counties) on the Rivers Conservation Program Registry.



This action became effective May 20, 2006. Projects identified in the Plan become eligible for implementation, development or acquisition grant funding through the Program.

A copy of the Final Plan is available for review at the Yellow Breeches Watershed Association, c/o Lower Allen Township Authority, 120 Limekiln Road, New Cumberland, PA 17070-2428, www.ybwa.org and the Department of Conservation and Natural Resources, Rachel Carson State Office Building, 400 Market Street, 6th Floor, Harrisburg, PA 17101, (717) 787-7672.

Students Monitor Mountain Creek

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impairment downstream, primarily due to the high number of pollution-tolerant Hydropsychidae (net-spinning caddisfly larvae). The diatoms also showed large numbers of nutrient-loving genera. The site upstream from the LOL discharge (and therefore not impacted by it) also showed more impacted macroinvertebrate communities and more nutrient-loving diatoms than the control site at Pine Grove Furnace State Park, indicating that other sources of these contaminants upstream from Land O Lakes are also contributing to a decrease in water quality.

Recommendations

Overall, Mountain Creek represents one of the few forested and largely unimpacted watersheds in Cumberland County. The upper reaches of the watershed are largely protected through their inclusion in state lands. The lower reaches are now being degraded by human activities. Therefore, the student researchers recommend that measures be taken to expand protection of this

resource to prevent further degradation. Such measures might include upgrading portions of the creek to exceptional value status, managing growth in the watershed, and being vigilant in regard to current and future permitting of point dischargers.

Further recommended studies include a more complete documentation of the impact of Land O Lakes further downstream near the confluence with the Yellow Breeches and research on other permitted point dischargers and nonpoint dischargers, such as stormwater runoff from Mt. Holly Springs. Students also recommended further study to determine a more effective protocol for the liming project on Dead Woman's Hollow.

Two students, Andrea Korman and Danielle Cioce are continuing the research on Mountain Creek during this fall semester. If you would like more information on this research, please contact Dr. Candie Wilderman at wilderma@dickinson.edu. We also welcome any comments or suggestions for further studies!

Yellow Breeches Watershed Association Board of Directors Election Ballot October 24, 2006

As an eligible member of the Yellow Breeches Watershed Association, the following votes are submitted for the Board of Directors as indicated by a check mark placed in front of the names below (current board members who have accepted nominations to be re-elected to the board) or for name(s) printed in the space below as write in candidate(s). Vote for no more than eight (8) Directors.

<input type="checkbox"/> Jennifer Hoffman <input type="checkbox"/> Richard Pugh <input type="checkbox"/> _____ <input type="checkbox"/> _____	<input type="checkbox"/> Gary Mullen <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____
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Note: Directors serve a 3-year term. Bylaws indicate that the organization shall have a Board of Directors of no less than 10 and no more than 20 members. Other current board members include the following individuals.

Term expires 2007 – John Eby, Vince McCollum, Jayson Romig, Bob Edwards, Steve Hoffman, and Ami Gulden.

Term expires 2008 – John Brossman, Dennis Auker, Bill Apgar, Tim Wakefield, David Martineau, Matt O’Donnell

Votes may be cast by mailing the completed ballot in a sealed envelope with the word “ballot” printed on the lower left front of the envelope by October 20, 2006 to:

Yellow Breeches Watershed Association
c/o Lower Allen Township Authority
120 Limekiln Road
New Cumberland, PA 17070

OR

By submitting the ballot at the start of the annual meeting to be held on October 24, 2006 at 7 PM in the barn at the Lower Allen Community Park.

Yellow Breeches Water Trail Update

The YBWA Water Trail Committee, under the guidance of Cumberland County's Greenway and Open Space Coordinator, Stephanie Williams, continues to work with the PA Fish & Boat Commission and municipal trail partners toward the initial goal of producing a printed water trail guide. Final drafts of a logo, trail mapping and guide text have been prepared and distributed to municipalities and private property owners affected by the proposed put-in and take-out points.

When the municipal approval and private land owner access agreements are secured, the water trail guide final draft can be approved. The PA Fish & Boat Commission will then do the design, layout and printing of the water trail guides, and initiate distribution. Free copies will be available to any interested individuals or groups, and copies will be distributed to the municipalities along the trail. This will probably occur during late fall and winter, so the guide should be available for the 2007 paddling/tubing season.

Future water trail projects include posting trail logo signs and information along the route, possibly in the spring of 2007, and updating the map in upcoming years as more stretches of the main stream become suitable for inclusion in the guide. Lengthening the trail segments will require elimination of several dam hazards, either by obtaining portage rights from the landowners or by voluntary removal of the dams by their owners. Improvements in access and facilities at currently available put-in and take-out sites, and addition of new public access points will also be included in periodic trail guide updates.

Messiah College Public Meeting Set for Stream Project

Messiah College and the Alliance for the Chesapeake Bay invite members of the Yellow Breeches Watershed



Association to attend a workshop on October 10th to contribute design ideas toward the restoration of the Yellow Breeches just upstream of the campus's covered bridge.

The meeting will be held from 7:00 - 9:00 pm in the Kline Building at Messiah College campus.



Problems with streambank erosion, in-stream siltation, and stormwater management will be reviewed, along with a presentation of restoration concepts under development.

Attendees' input on uses of the stream corridor, including recreational access will be solicited.

For more information, contact Donna Morelli at the Alliance for the Chesapeake Bay - 737-8622 or dmorelli@acb-online.org.

New Group Formed to Protect Opossum Lake

Friends of Opossum Lake Conservancy is a newly formed nonprofit organization dedicated to the restoration of Opossum Lake in Lower Frankford Township. The organization held a "Trail and Trash Day" on September 16th, its first major event to build public interest in the group's mission.

Improvements are being made to the Angler's Access Trail with partial funds secured from the Cumberland County Land Partnership. Funds have also been dedicated for reconstruction of the lake's dam and spillway, including grants from the Cumberland County Growing Greener program, PA Fish & Boat Commission, and Lower Frankford Township Supervisors. For membership information, contact Cindy Criswell at 486-8904 or Cheryl Pauli at 258-6932.