



# THE BLACK CREEK WATERSHED WIRE

News from Black Creek Watershed, Cary, NC

November 2006

Visit the project website at [www.ncsu.edu/WECO/blackcreek](http://www.ncsu.edu/WECO/blackcreek)

## Black Creek Meeting Highlights

The Black Creek Watershed Association (BCWA) last met on October 30 at Bond Park. Thanks to Matt Flynt for securing the Oak Room at the Community Center. Our next meeting on Dec. 4 will be held in the same place.

Dave Penrose provided an interesting and educational presentation on benthic macro-invertebrates, with a particular focus on what was found in Black Creek samples.

The BCWA participated in break-out group discussions aimed at thinking about the end products of a functional Black Creek Watershed.

This brain-bending exercise required participants to think with the end in mind, working backwards to describe what the watershed needs to provide in order for the community to benefit from it. Read on to see how they responded to the task! We will use this information to ensure that our technical team is asking the questions in their research that will address the community needs. If our current watershed assessment plan does not link to these identified needs, we'll discuss whether other activities need to be planned.

Finally, if you are not yet on the Black Creek listserve but would like to be, send an email to: [mj2@lists.ncsu.edu](mailto:mj2@lists.ncsu.edu) with the following in the body of the email: subscribe blackcreek [J.DOE@ADDRESS.COM](mailto:J.DOE@ADDRESS.COM)



## Aquatic Insects and Water Quality

Dave Penrose, NCSU Water Quality Group, explained what benthic macro-invertebrates (benthos) are, and why they are an indicator for water quality. His entire powerpoint presentation is on the project website. For more info see:

[www.epa.gov/bioindicators/html/invertebrate.html](http://www.epa.gov/bioindicators/html/invertebrate.html)

**Definition:** Invertebrates (animals without backbones) that live on the stream bottom and are visible with the naked eye, such as aquatic insects, crustaceans, worms, clams, and snails.

**Why use Benthos as an indicator of water quality?**

- ◆ Found in all aquatic habitats
- ◆ Easily and inexpensively collected
- ◆ Most life cycles are at least one year or more
- ◆ Integrate a wide array of pollutant types

◆ Important in the diets of fish  
Three orders of benthos are considered most important for evaluating water quality:

1. Ephemeroptera- mayflies
2. Plecoptera- stoneflies
3. Trichoptera- caddisflies

The following image is of a common mayfly



**The Black Creek Watershed Association will meet on the last Monday of the month\*, with an exception due to Thanksgiving. Next meeting:**

**Monday, Dec. 4**

**6:15-8:30 p.m. (Enjoy desserts from 6:15-6:30)**

**Bond Park Community Center; Oak Room**

**Bond Park is located on High House Road, halfway between Maynard Rd. & Cary Parkway.**

**Agenda:**

**Discussion items include:**

- Stream sampling protocol
- Streamwatch for Black creek
- Follow-up on community benefits/ ecosystem service discussion

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Christy Perrin
Watershed Education for Communities and Officials
Dept. Agricultural and Resource Economics, NCSU
Campus Box 8109
Raleigh, NC 27695-8109

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We will use the information generated by the BCWA to determine with the technical team :

- 1. if any ecosystem services are missing, and
2. how they may be assessing the watershed's ability to provide the services identified.

We hope to use this information to ensure that our technical team is asking the research questions needed to address the community's needs. If our current watershed assessment plan does not link to these identified needs, we'll discuss whether other activities need to be planned.

As the project moves forward, the research team will provide information about how the watershed is functioning, and how much improvement is possible. This information will allow the BCWA to determine realistic goals for watershed improvement.

BCWA lets us know how are we doing

BCWA members completed feedback surveys in October. We heard:

Meeting logistics have been okay, although starting and ending on time are important! Parking at Bond was troublesome.

Point taken- we'll add in 15 minutes for social time at the beginning for those who want it, with a prompt 6:30 start next time. If Herb Young Ctr is available in future we'll try there, but they are busy!

Participants enjoy the educational programs, and request more info on flora and fauna. Academic partners are encouraged to use lay-person's terms for better understanding, and provide regular research updates. Participants appreciate the diversity of participants, and the newsletters and emails, although a few more days notice on emails was requested (we assume for meeting notices), as well as presentation print outs in case the screen is hard to see.

We'll request printouts from now on, but keep in mind that guest speakers may not have time to provide them to us beforehand.

Finally, a spring Saturday field trip on the greenway was suggested. Good idea! We will plan a watershed and BMP tour!

October 30 Meeting Participants

- Liz Adams, Silverton HOA
Patrick Beggs, WECO; NCSU
Nathan Cobb, Beechtree resident
Susan Davenport, Windchase at Beechtree, Cary PRCR Advisory Board
Amin Davis, Beechtree resident
Nora Deamer, NCDWQ Basinwide Planner
Bill Dupont, North Raleigh resident
Matt Flynn, Town of Cary
Marilyn Grolitzer, North Raleigh
Elena Horvath, Silverton resident
Pat Hudson, Cary Rotary
Eric Kulz, Regional NCDWQ, North Harrison Trace resident
Grace Lawrence, Wake County Cooperative Extension
Heidi Maloy, Cary Academy
Vickie Maxwell, Wessex HOA
Bob Morris, Silverton HOA, Cary Greenways Committee
Dave Penrose, NCSU Water Quality Group
Christy Perrin, WECO, NCSU; Windchase at Beechtree resident
Deborah Robertson, Lake Crabtree County Park
Rex Schaberg, Harrison Place/NCSU
Shirley Wasson, Northwoods resident