



# Thinking Like a Watershed

The semi-annual Newsletter of the  
Black Earth Creek Watershed Association

Volume 5, Issue 2

Autumn 2003

## ***BECWA's Goals***

- To protect, conserve, support and advocate for the wise, long-term management of the physical, biological, environmental, cultural, and historical resources that constitute the heritage and future assets of the Black Earth Creek Watershed.
- To foster and encourage citizen and locally-based stewardship among the many members of the watershed community.
- To provide a forum for civil and informed discussion of issues and problems in the watershed.

## ***Late Breaking News...***

The ***Black Earth Creek Resource Area Plan*** was passed unanimously last week by the Dane County Parks Commission, the Public Works Committee, the Zoning and Natural Resource Committee, and the Dane County Board of Supervisors, with no amendments.

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## **"Passport to Your Watershed" A great success!**

*By Juniper Garver-Hume*

BECWA added a new dimension to the Cross Plains' Trout Days celebrations this year with our "Passport to Your Watershed." The Passport gave people of all ages an opportunity to learn about the Black Earth Creek trout that give the celebration its name, and have fun too!

Over 30 youth and adults received a passport for their journey through five different stations. After each station's activity was completed, they received a sticker for their passport. Once a participant had all five stickers their prize was a live oak tree!

The stations provided interactive, hands on activities that were liked by all. The Fly Fishing station was done on land and gave participants a chance to learn how to cast from a Trout Unlimited volunteer while volunteers demonstrated how stream insects are imitated using feathers and fur tied to tiny hooks at the Fly-Tying Station.



Fish T-Shirts at Trout Days—Passport to Your Watershed, May 3rd, 2003.

The biggest hit was fish printing where folks got their hands dirty painting rubber fish and printing these fishy images on BECWA T-shirts or paper to take home.

During the day, award winning, Wisconsin artist Virgil Beck painted a picture of a rainbow trout in its home environment – under water in the stream. This painting was raffled off at the end of the day as a fundraiser for BECWA.

Take a look at our website for more photos from this event and be sure to **join us next year!** ◇

## **BECWA Launches Website**

*By Juniper Garver-Hume*

Black Earth Creek Watershed Association can now be found online! Thanks to the services of the Madison Newspapers you can learn about BECWA events, meet-

ings, and history on one of their Community Pages. To check it out for yourself go to <http://www.madison.com/communities/becwa/>.

Our site includes articles and photos describing recent events, contact

information and our Board of Directors, past newsletters, and a downloadable membership form.

Please take a look and tell us how we can make it better! ◇

## Message from the President—Barbara Borns

**The Black Earth Creek Watershed (BECW)**—a popular trout stream—fertile agricultural land—cultural resource—vulnerable and endangered. Many factors play into keeping this fragile system healthy. Every change we make in land use, the way we treat the land in the watershed, affects the health of the Creek.

In this early part of the 21<sup>st</sup> century, we are seeing world-wide population increases accompanied by rising demands for food that are outstripping our ability to produce and deliver adequate food supplies to a hungry world. Within Dane County, one of the fastest growing parts of the state, the major growth areas are not in the city of Madison but rather in the neighboring cities and villages. Between 1990-2001, growth in villages was 44.8 % while Madison grew only 10.3%.

Dane County contains some of the richest, most productive farmland in the state. Yet it has been disappearing at an alarming rate as development moves out from Madison. Dane County zoning records show that in 2001 there were approximately 1845 acres rezoned from A-1 Agriculture and 71% was for the creation of new residential lots. Once farmland has been developed, it will never produce food at the same level.

If farm families who have put their lifeblood into raising crops or livestock find that none of their children wish to continue farming, their best financial option is often to sell their land for development. But as new settlement occurs in BECW, the very resources and beauty that attracted settlers are lost or diminished.

Are there better ways to reward farmers for their years of labor?

One tool that shows promise is the purchase of development rights (PDR). Using this method, farmers are paid a fair price for the rights to develop their land while retaining the title to the land. This is a tool that has been used in the Town of Dunn and other places but there are critics of PDR too. We are still searching for the perfect planning tool to balance the health of the Creek, continued farming efforts and inevitable development.

The BECW is under intense development pressure now that will continue into the future. As each watershed community complies with their Comprehensive Planning mandate (Smart Growth), we believe BECWA can help in integrating and coordinating these plans so that the cumulative impacts of the individual plans on the watershed can be considered. Stay tuned. ♦

## Ice Age Trail Closer to Reality!

*By Drew Hanson  
Trailway Director, Ice Age Park and Trail Foundation*

Imagine being able to hike from Black Earth Creek north for half a day or more, turn around and hike back into Cross Plains where you could celebrate a great outing on the trail at your home or at one of the eating/drinking establishments along Main Street. Your hike could take you to Indian Lake County Park or on a multi-day hike to a bed-and-breakfast in Lodi or camping at Devils Lake State Park. This vision moved another step closer to reality earlier this year!

A property in Black Earth Creek watershed was purchased in May by the Ice Age Park and Trail

Foundation (IAPTF) for the public's enjoyment on the Ice Age Trail. The property includes a 51-acre parcel that is now owned by IAPTF plus a 34-acre easement that connects with the village of Cross Plains.

The property has some steep, rocky slopes and 200 feet of total vertical relief. Its Driftless Area features will provide a compelling contrast to the effects of continental glaciation seen along most of the thousand-mile Ice Age Trail route through Wisconsin.

Entering the easement portion of the property from the village, the Ice Age Trail will pass through a

black walnut forest with many tumbled native rocks. At the crest of a ridge, a small rock outcrop and remnant prairie will offer outstanding views of the village, Black Earth valley and beyond. Other

prairie and oak opening remnants are within the easement area that will require some weeding of invasive plants.

The highest point on the property is within a 17-acre field. Wooded slopes of mature oaks nearly surround the field. It provides a welcomed feeling of seclusion.

The property is expected to provide about a one-mile segment of the Ice

*(Continued on page 5)*

*Imagine being able to hike from Black Earth Creek north for half a day or more, turn around and hike back into Cross Plains ...*

## BECWA Events

### Mark Your Calendars

#### 2003-2004 Events

**Autumn 2003:** BECWA Board Meeting, Black Earth Library. Date TBA, 7:30 PM to 9:30 PM. Check our website for current information.

**October 4<sup>th</sup>, 2003:** Stewardship for the Land: Protecting Our Resources for the Future. A Field-Based Workshop for landowners in BECW with 10-acres of land or more. Contact Mindy Habecker at (608)224-3718 for more info.

**April 2004:** Annual Black Earth Creek Clean-Up. Date TBA. Check our website for current information.

Black Earth Creek Watershed



## A Look at Brewery History in the Black Earth Creek Watershed

By *Mindy Habecker,*  
*Dane County UW-Extension*

In the latter part of the 1800's almost every village and city in Wisconsin boasted a brewery. The Black Earth watershed proved no exception with breweries in Mazomanie and Cross Plains. Many of the immigrants who settled in Wisconsin came from Germany or other parts of Europe where beer is an important part of their culture. Although homesteaders made their own beer, they often produced results inferior to what they desired. Thus there was a demand for high quality beer and the agricultural conditions and water resources to support the industry.

The stories behind breweries are complex tales, yet each is unique. Mazomanie was home to at least two breweries, Tinker and Schlin operated in the 1870's and produced about 500 barrels (1 barrel equals 31 gallons) a year, and the Mazo Manie Brewery founded by



Esser Brewery in 1898 with the Jacob Esser family, horses and delivery wagons. Photo courtesy of Wayne Esser.

Peter Weard in 1851 and later operated by Ambrose Lang and his family until 1902. Cross Plains had three breweries in existence, the Otto Kerl Brewery from 1851-1861, the Henry Mehels brewery in Christiana (absorbed into Cross Plains about 1900) in the 1870's, and the George Esser and Sons Brewery from 1863 until 1913. The Esser family is now brewing again.

I cannot hope to tell the story of each of these breweries in this

short piece, but will use the Esser Brewery to exemplify the business history. I take my information from an interview with Wayne R. Esser, the fifth in now six generations of Essers involved in Wisconsin's beer history, and from George Esser's (founder of the brewery) autobiography *A Pioneer Life*.

George Esser was born in 1825 in Rhineland Germany (Prussia) and apprenticed to learn the masonry trade at age 13, shortly after his father's death. His stepfather also assisted in his education allowing him to take courses in architectural drawing and mathematics in preparation of his master mason exam. George was drafted for military service and served for three years, five months in the army reserves quelling internal strife within

*(Continued on page 4)*

## A Look at Brewery History (continued)

*(Continued from page 3)*

Germany. Soon after he was discharged in 1851 and about to take the last part of his trade exams, he heard that he was to be drafted again so he resolved to immigrate to America.

George traveled to Wisconsin where he had friends and worked as a mason in Sauk City, then in Madison. In time he assisted in building a brewery for the brewer Mr. Sprecher and was asked by him if he'd consider going to Portage and work for Sprecher's building other cellars and malt driers for their breweries. George declined, but decided then to go into business for himself. After operating a brewery in partnership in Monroe for four years in the late 1850's and early 1860's, friction with his partner led him to dissolve his partnership and look for a new site. Acquaintances suggested that he start a brewery at Cross Plains close to a creek. George thought that the place was too small from a business standpoint, but when he heard that Leinenkugel was in the process of drilling a well in Cross Plains in preparation of starting a brewery, he decided to go forward.

(Mathias Leinenkugel had just edged him out previously from starting a brewery in Eau Claire.) So in November of 1862 he purchased land and began construction of Esser's Brewery. This brewery was on land purchased from the Joseph Koenig farm and gives the name to Brewery Creek that is adjacent to it in Cross Plains. He hired two brew masters (one had worked for Sprecher's) and brewed his first beer in 1863. This head start caused Leinenkugel to abandon their Cross Plains project.

Business was slow at first as the nine saloons in Cross Plains were signed up to take Madison's Sprecher's beer or Sauk City's Leinenkugel or Stiegerhammer beers. In a few years Esser obtained their business and also business in Middleton, Black Earth, Town of Springfield, and Mazomanie. After the civil war with the return of the veterans, business boomed and he expanded the brewery yet still could not

keep up with the demand. Esser finally had to supplement his beer with purchases from Milwaukee. He was brewing beer almost every day that sold for \$9-10 per barrel.

*After the civil war with the return of the veterans, business boomed and he expanded the brewery and still could not keep up with the demand.*

The primary malting grain, barley was grown in the state for this ready market. A great demand for lo-

cally grown hops also existed especially during the Civil War times when a lice infestation destroyed the East Coast hops production. Between 1860 and 1865, the amount of hops grown in Wisconsin increased fivefold with no other crop approaching its marketability or its profitability. In 1867, Sauk County had a hops crop of four million pounds. The hops fruit provides a bitter taste, flavor and preservation properties to beer. By 1867 the lucrative hops market crashed, as prices plummeted.

Brew masters primarily produced lager. Lagering is the process of beer making that requires beer to

*(Continued on page 5)*

## BEC Fish Report

*By Scot Stewart,  
Wisconsin DNR*

The DNR fish population estimate conducted this year on Black Earth Creek shows that the brown trout population is recovering very nicely in the stretch subject to fish kill in June of 2001 (Stations 1-5 shown in Figures 1 and 2 on page 7). At the time of the kill, I estimated a loss of 84% of the trout present



Brown trout from Black Earth Creek.

prior to the kill. The population in this part of the stream is now largely composed of naturally reproduced yearling brown trout.

Following the kill, the Department chose not to stock brown trout on top of a reproducing population, in anticipation of strong natural reproduction filling the void left by the fish kill. In

2002, the Department did stock a large number of yearling rainbow trout in the area affected by the fish kill to provide anglers with a fishery as the brown trout population recovered. Larger rainbow trout in Figure 2 are the result of a limited amount of stocking of brood stock to provide anglers with larger rainbow trout.

DNR surveys Black Earth Creek using electrofishing methods, which are preferred for their accu-

*(Continued on page 6)*



## BECWA Plays Role in Saving River Protection Grants from the Budget Axe

By Barbara Borns

This spring as the Legislature and Governor were trying to balance the state budget a number of items, which had been funded in past years were on the chopping block. At the outset, the State Legislature and the Governor disagreed on the future path for the Department of Natural Resources (DNR) River Protection Grants program.

BECWA played a pivotal role in saving the program. Over the past few years, this program has helped many statewide, citizen-directed organizations to manage their water resources. BECWA had bene-

fited from one of these grants by hiring a watershed coordinator over the past 3 years. These grants help leverage local funding and support the capacity of groups such as BECWA to protect our water resources.

Lead by BECWA Vice President and watershed resident, Jim Troupis, his colleague Brian Dake at the law firm of Michael, Best, Friedrich, as well as BECWA President Barbara Borns, and Board member Steve Born, launched an effort to meet with members of the Legislature's Joint Finance Committee (JFC). Early in May, the quartet met with a number of mem-

bers of the JFC or with their staff to impress upon them the importance of these grants and the impressive record of accomplishment of earlier recipients. Since 2003 is designated in Wisconsin as the "Year of Water," it seemed particularly important to maintain this program.

When the votes were tallied, the JFC voted unanimously to approve not only the initial amounts suggested, but to add more than twice those funds (\$284,000) to the program. The Legislature and the Governor should be congratulated on their common efforts to protect these vital resources. ◇

## Ice Age Trail Closer to Reality!

(Continued from page 2)

Age Trail, spur trails to vistas and possibly a short loop.

The acquisition of this key property would not have been possible without a grant from the Knowles-Nelson State Stewardship Fund and a match grant from a special federal Ice Age National Scenic Trail Land and Water Conservation Fund (LWCF) appropriation.

If you enjoy recreation on foot and would be interested in helping IAPTF monitor or maintain this or other nearby properties, please contact me at 663-1281 or check out [www.iceagetrail.org](http://www.iceagetrail.org) for more general information. ◇



Rock outcrop on new IAPTF property in Black Earth Creek Watershed near Cross Plains.

## A Look at Brewery History (continued)

(Continued from page 4)

be stored in cellars for a slow, second fermentation at cool temperatures with the yeast sinking to the bottom. For both storage and fermentation it required great quantities of ice. Nearly all of the breweries operating before the Civil War had been established in northern climates because of this. George Esser built an icehouse in 1870, which enabled him to brew in the summertime as well as during the winter. He purchased his ice from the millpond at Black

Earth or from Pheasant Branch off Lake Mendota. In 1873 he bought an 80-acre farm and later constructed a pond there to cut his needed ice. This reduced his yearly ice costs from \$400 to \$200.

In the 1881 George brought his son Jacob into the business and gradually played a less active role. Jacob brewed about 50 barrels a week and had storage for 2,000 barrels. He had three teams of horses making deliveries often from 4am until 8pm and even

later. Eventually other generations of Essers took over until in 1910 they were forced to discontinue brewing due to large breweries systematically squeezing smaller breweries out of the market. The Essers then became distributors until about six years ago when they began brewing again under two labels Esser's Best and Esser Cross Plains Special. The Essers are currently in their sixth generation of beer production and distribution. ◇

## David Lucey—a BECWA Board Member Profile

By Juniper Garver-Hume

David Lucey has lived in the Black Earth Creek Watershed, north of Cross Plains, on Hwy K for over 25 years. During that time, he has been active in the Town of Berry government and conservancy issues. He has taught at Waunakee Middle School for 32 years.

The BECWA Board of Directors welcomed David to the Board at their July meeting. Ron Ahner, a past board president, first informed him of the work of

BECWA in the watershed. Further investigation convinced him that board membership would be a valuable experience and BECWA a good cause.

*"I would like to see a heightened awareness in all people living in the watershed of how activities they engage in and decisions they make can make a difference in the health of the watershed and the Creek"*

David agrees with the sentiments of many, that the Black Earth Creek watershed is a valued resource that is in relatively good shape despite human activity. David sees polluted runoff from

agricultural land and from residential developments as the two main threats to the Creek. For that reason, he would like to continue efforts to protect the land and water resources of this area.

"I would like to see a heightened awareness in all people living in the watershed of how activities they engage in and decisions they make can make a difference in the health of the watershed and the Creek," explained David, "and I believe that BECWA can continue to make a difference in that regard." ◇

## Fall Landowner Stewardship Workshop Planned

By Juniper Garver-Hume

Saturday, October 4th BECWA will be cosponsoring "Stewardship for the Land: Protecting Our Resources for the Future."

This field-based land stewardship workshop is for private landowners with 10 or more acres of land in the Black Earth Creek Watershed. Possible topics for this

workshop include:

1. Woodland management,
2. Prairie establishment and management,
3. Invasive species identification and management,
4. Wildlife management, and
5. Water resource protection.

More information will be sent to qualifying landowners in the near future.

Feel free to contact Mindy Habecker at the UW-Extension office for more information, (608) 224-3718 or [Habecker@co.dane.wi.us](mailto:Habecker@co.dane.wi.us). ◇

## Fish Report (continued)

(Continued from page 4)

racy and safety to fish populations.

As the fish were caught and counted in tubs like the one shown to the right, all yearling brown trout were given an adipose and left ventral fin clip for future age identification. Previous permanent clips identified the lengths of older fish.

The Department annually sam-



Fish population estimates are conducted using electrofishing on BEC. The fish are temporarily held in tubs like this one. Photo courtesy of the WDNR, April 1989.

ples two stretches of Black Earth Creek to monitor trends in trout

population. Stations 1-5 are the stretch most significantly impacted by the 2001 fish kill and are located downstream from South Valley Road. Stations 6-15 are located between Highways KP and P in the Village of Cross Plains.

Population density, population trends, and size structure are presented in Figures 1-4 (see page 7). The density and size structure of

(Continued on page 7)

# Fish Report (continued)

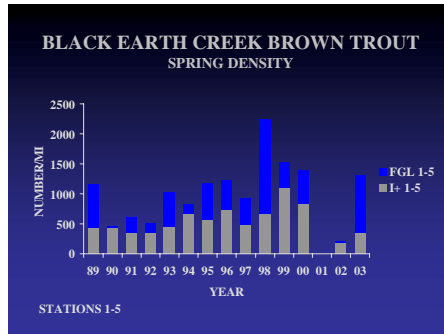
*(Continued from page 6)*

trout in Cross Plains (Stations 6-15) is illustrated in Figures 3 and 4. This stretch of stream can be characterized as a stable, dense, naturally reproducing brown trout population.

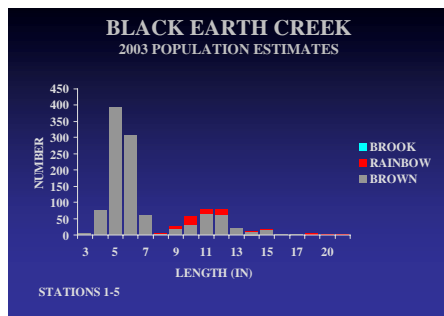
The size structure in 2003, within Cross Plains, is good with fish up to 17 inches. We did sample one rainbow trout, which likely moved upstream into this stretch and several brook trout in Cross Plains as well.

Rainbow trout sampled in Stations 1-5 were the result of 5,286 yearling fish stocked in the previous spring. These fish provided an excellent fishery in 2002 in the absence of brown trout due to the kill. Survival of these fish to this year was low, which is typical of this species in lower BEC. Brook trout sampled in BEC usually move from Garfoot Creek, where they are stocked in the fall. ♦

## Estimates for Stations 1-5:

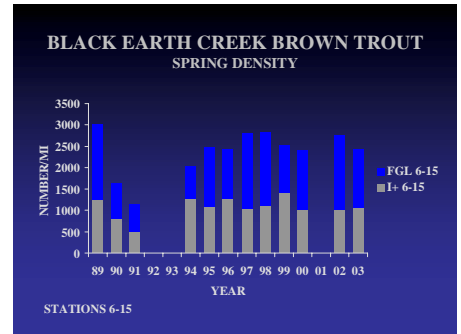


**Figure 1.** Trout population estimates by year for the stretch of Black Earth Creek downstream of South Valley Road. This stretch was subject to fish kill in 2001. FGL represents the fingerling densities and I+ is the fish older than one year .

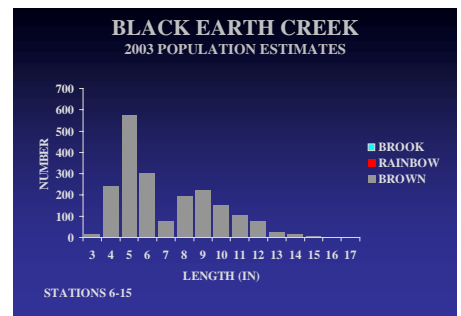


**Figure 2.** Trout population estimates by length and species for the stretch of Black Earth Creek downstream of South Valley Road.

## Estimates for Stations 6-15:



**Figure 3.** Trout population estimates by year for the stretch of Black Earth Creek between Highways KP and P in the Village of Cross Plains. FGL = fingerlings and I+ = fish older than one year old of age.



**Figure 4.** Trout population estimates by size and species for the stretch of Black Earth Creek between Highways KP and P.

# Wisconsin Brimming with Year of Water Celebrations

*By Shallie Pfeiffer,  
Waters of Wisconsin Associate, Wisconsin Academy of Sciences, Arts and Letters*

A word of warning about the year 2003: plan to get wet. Citizens and groups all around the state are taking seriously Gov. Doyle's call to "celebrate water as our most precious natural resource" during Wisconsin's Year of Water.

From a "Fire & Ice Winter Festival" in Pewaukee and a drinking water public forum in Madison to a "Get Wet and Energized" gathering for school-children at UW-



"I know we will take this occasion to celebrate water as our most precious natural resource, participate in a statewide effort to understand and appreciate our waters, and work together on projects that conserve and sustain our waters for future generations."  
*Governor James Doyle, endorsing Wisconsin's Year of Water*

Stevens Point and a "Mississippi Mud Day" in La Crosse, people are gearing up to learn more about water in our state. Events range from the serious discussions about such issues as the dangers of water privatization and the detection of E. coli bacteria in drinking water to activities that add fun to the mix, such as group paddling trips, volunteer cleanups,

and wetland restoration projects.

Wisconsin's Year of Water takes place during a time of increasing awareness around the world about the importance of water and the threats to our global water supply. The year 2003 is also the International Year of Fresh Water (sponsored by UNESCO) and the 100th anniversary of the National Wildlife Refuge System.

Ideas for activities and a listing of events planned across the state for Wisconsin's Year of Water can be found at [www.wisconsinyearofwater.org](http://www.wisconsinyearofwater.org) or call Shallie Pfeiffer, at 263-1692 Ext. 21 with questions.

**BLACK EARTH CREEK WATERSHED ASSOCIATION**

c/o UW-Madison, Gaylord Nelson Institute for Environmental Studies  
550 N. Park Street, 70 Science Hall  
Madison, WI 53706-1491



## Black Earth Creek Watershed Association

Established 1987

**Board of Directors:**

Barbara Borns, President  
Jim Troupis, Vice-President  
Tom Ehler, Secretary  
David Lucey, Treasurer  
Steve Born                      Carl Jones Jr.  
Wendy Sterne                    Vern Wendt

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*For the wise management of the land and water resources in the Black Earth Creek Watershed*

### **Many Thanks to our Major Donors of 2003:**

- ~ Badger Fly Fishers ~
- ~ Black Earth State Bank ~
- ~ Dane County Conservation League ~
- ~ Gaylord Nelson Institute for Environmental Studies ~
- ~ Michael, Best and Friedrich LLP ~
- ~ Natural Heritage Land Trust ~
- ~ Southern Wisconsin Trout Unlimited ~
- ~ Trails Media Group, Inc. ~
- ~ Wisconsin Department of Natural Resources ~



*For the wise management of the land and water resources in the Black Earth Creek Watershed*

# Join BECWA Today!

By joining BECWA today you become part of a dedicated community of people who recognize this gem we have in our midst.

Your membership will support BECWA's:

- Educational Forums
- Annual Earth Day Creek Clean-Up
- *Thinking Like a Watershed*, our twice annual newsletter

Please lend your support to protecting this outstanding creek which runs through the heart of our community!

*Note: If you are already a member, check your address label on this newsletter for your membership expiration date.*

**Membership:**

- Watershed Patron                      \$25
- Household                                      \$15
- Basic    \$10

- Yes! I'm interested in volunteering my time to BECWA.**

\* All donations are tax deductible.

Name \_\_\_\_\_ Date \_\_\_\_\_

Address \_\_\_\_\_

Phone \_\_\_\_\_

Email \_\_\_\_\_

**Fill out this form and mail it with your check to:**

BECWA- Treasurer  
David Lucey  
7952 County Hwy K  
Cross Plains WI 53528

Phone: 608-265-6712  
Fax: 608-262-2273

Email: jrgarverhume@wisc.edu  
Website: www.madison.com/communities/becwa/