First WNCGBC Field Trip an Inspiring Success

by Bobby McHugh / photos by Travis Somerville

On April 13, 2002 a contingent of WNC Green Building Council members participated in our first field trip to the straw bale house of Doug Keefer and family. Unanimously, we left feeling charged with possibilities and a general good feeling that a program of successive trips will add to the landscape of educational services the council can offer the larger community.

A Model of Green

Doug Keefer and wife, Nelle, found an idyllic setting for their home: 7 acres in the “back forty” of a large farm in Leicester, NC. Mountains to the north, with ridges to the east and west cradle the south-facing site with views of the farm. A creek ripples along side passed enormous black locust trees—no doubt the site provided inspiration for the couple as they designed the house! The original structure is 1200 square feet in two stories. A new 600 square foot addition completed this year brings the house to an ample 3-bedroom/3-bath with an entrance foyer, and a combo kitchen-dining-living room on the south side. To begin listing the house’s environmental attributes would add another page to this newsletter………besides the widespread use of locally milled lumber, the house touts an engineered post and beam frame with the straw bales as infill; a masonry wood heater that not only heats the air in the house, but also the water in the radiant floor heating throughout; an active hot water solar back-up system and an on-demand hot water heater; passive solar design; super-efficient windows and a 50-year tin roof.

Among the house’s finest qualities is the incredible finish work. A woodworker for some 15 years, Doug set out to trim the house in style. Cherry cabinets, door jambs, and door and window trim wow envious visitors. The staircase features solid walnut newel posts, and most of the furniture also carries Doug’s stamp. The foyer floor welcomes guests with a 10-foot daisy fashioned mosaic-style with salvaged granite; the mosaic covers the whole addition, switching to marble in the bathroom. Aesthetically, the house speaks to the depth of understanding and caring these homeowners have for the natural world. And for all of the “extras” that would daunt the typical homebuilder to go cheap, Doug’s resourcefulness, good planning and hard work were able to keep costs at an astonishing $40 per square foot.

Field Trip: Future

Through offering several field trips a year, the Green Building Council hopes to educate the greater community about local successes in environmental building. Today in western North Carolina there are many minds pushing ahead with the thought that there can be sustainable building here. By visiting these examples, we can gain an informed impression of what practices work in both our environmental and economic climates. Future field trip dates will be made available to council members . . . . . so join today!
First WNCGBC Public Forum to be Held in June

The first WNCGBC public forum will be held on June 25, 2002. The event will take place at the back room of the Laughing Seed (enter through Jack of the Wood), from 4:00 - 7:00. The event will be a mixture of celebration and information. It will be a party for the long awaited completion and distribution of the Green Building Directory, which is available at locations throughout the Western North Carolina area, as well as online at www.wncgbc.org. It will also give council members a chance to talk with other members of the community. There will be a brief forum, in which members of the Council will field questions from the community. If you have questions, concerns, or are just an interested party, we would love to see you at the event! Email - robin@rowhouse-architects.com for more information.

"The Green Building Directory is available at locations throughout WNC."

No Arsenic in Wood by 2003

by Robin Raines Elliott

Lumber companies in the United States have agreed to phase out the use of an arsenic-based preservative in pressure-treated wood by 2003. The Environmental Protection Agency announced the agreement to end the use of chromated copper arsenate (CCA) in almost all lumber used for residential projects. CCA is used to protect lumber from decay and insect damage. Research over the last ten years has found that arsenic can leach out of the wood into surrounding soils, and onto the skin of those who touch it. Children are especially vulnerable. Long-term exposure to arsenic through breathing or skin contact can cause cancer of the lung, bladder, and skin; and is suspected of causing other cancers.

Switzerland, Vietnam and Indonesia have banned pressure-treated wood. Seven other countries have proposed restrictions. Precautions should be taken to minimize exposure to the wood. Advocates say the wood should either be removed or be sealed every year with polyurethane or another hard lacquer. Arsenic can be sealed into wood with oil-based stains. People are advised to wash their hands after touching the wood.

The EPA stopped short of recalling all the CCA wood already in use. The lumber industry contends CCA is still safe but decided to go with the EPA decision because of consumer pressure. Environmental groups recommend the industry use alkaline copper quat as an alternative. ACQ costs about 10 per cent more.

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Members of the Western North Carolina Green Building Council (WNCG BC) recently attended two workshops on green/sustainable building practices in North Carolina. The first, in March, “Green Building for Residential Professionals” was a satellite workshop sponsored by the NC Solar Center that took place in Greensboro, Asheville, Charlotte, and Raleigh. Cindy Meehan-Patton, Chair of the WNCG BC, attended. The one day session included a primer on residential green building guidelines and a charrette, where participants designed a home for a family while incorporating the sustainable building guidelines presented at the workshop.

The second workshop, “Technologies and Strategies for Achieving High Performance Buildings”, took place in Charlotte on April 9, 2002. Terry Albrecht, Duncan McPherson, and Cindy Meehan-Patton represented the WNCG BC. This second workshop was put on by Triangle J Council of Governments (Triangle J) of Raleigh, NC, and other sponsors, including the NC Solar Center. All participants were given notebooks with Triangle J’s High Performance Guidelines for commercial buildings. The morning session was a primer, the guidelines were briefly discussed. Also included in the morning session was an extensive presentation on daylighting in schools. Other topics discussed included site, water, energy, materials, and indoor environmental quality issues. The afternoon consisted of breakout sessions that related to different sections of the guidelines. Each breakout session was lead by an expert in that area, topics included: solar energy, daylighting, rainwater catchment and stormwater management, mechanical systems, building envelope and thermal mass, and green products.

WNCG BC members in attendance came away from these workshops with ideas for using these guidelines in WNC. Cindy Meehan-Patton would like for the WNCG BC to be the WNC branch of public education and training for the Triangle J High Performance Guidelines for commercial buildings. Triangle J has developed these guidelines for NC, within the framework of applicable NC regulations. The ultimate goal of the WNCG BC will be to make high performance building mainstream in commercial development. Currently, there are national guidelines for commercial building known as the LEED guidelines. According to Cindy Meehan-Patton, the Triangle J guidelines are more thorough, user friendly, and sought out. However, LEED guidelines have a rating system that enables users to build while incorporating some or all of the guidelines, ratings include silver, gold, and platinum. Triangle J guidelines have no rating system, resulting in less incentive for use. Cindy suggests that Triangle J’s high performance guidelines could benefit from an incentive-based rating system. While the WNCG BC will promote the Triangle J guidelines for commercial building, we are currently seeking funding to develop our own residential sustainable building guidelines.
How Can I Join?

Simply fill out the form below and mail in with your membership dues.

*(dues are for one year membership)*

Name __________________________
Title ___________________________
Affiliation_______________________
Address _________________________
________________________________
City ____________________________
State _________ Zip ______________
Phone __________________________
e-mail __________________________
Date ____________________________

Membership categories:

- Individual $35
- Business $100
- Nonprofit $50
- Silver Level Sponsor $250
- Gold Level Sponsor $500
- Platinum Level Sponsor $1000

Total Amount Enclosed __________

The Mission Statement:

The Western North Carolina Green Building Council is a non-profit organization whose mission is to promote environmentally sustainable and health conscious building practices through community education.

WNCGBC
PO Box 8427
Asheville, NC 28814
www.wncgbc.org