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Tuesday, February 2, 2010

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Jerrie Fiala, Editor: jerrie.fiala@wmich.edu**ASCE casts concrete canoe for 2010 regional competition at the CEAS**

About 30 enthusiastic CEAS students spent hours last week building a concrete canoe.



ASCE students apply concrete to a Styrofoam mold. After 28 days of curing, the WMU entry in the 2010 NCRC concrete canoe competition will be born

Paul Pagano, a civil engineering senior and project leader, supervised the application of the concrete slurry and other innovations to the Styrofoam mold of a canoe that will be the means of achieving glory in late March.

After 28 days of curing, the canoe will be sanded, finished, and named. It will then represent WMU at the 2010 American Society of Civil Engineers (ASCE) North Central Regional Conference (NCRC), hosted by WMU.

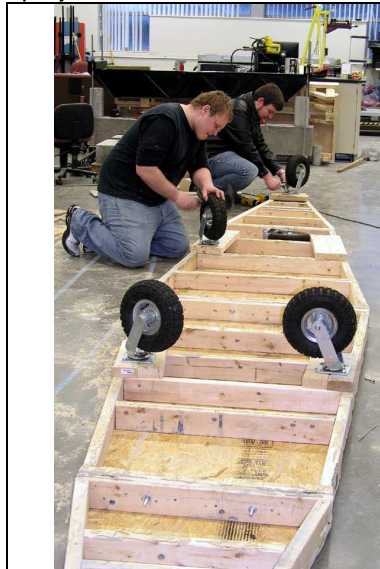
Britney Richmond, president of WMU's ASCE, was enthusiastic about the 2010 canoe's space-frame design and site-specific reinforcement. "We basically modeled it like a truss system," she said. "When we remove the Styrofoam, you'll see ribs inside the canoe."

The new canoe – the sixth canoe the team has made since the team was formed in 2002 – features two eco-friendly mix

designs: one higher strength structural mix and one light weight diaphragm "skin" mix. Richmond said that the innovations should result in "a thinner, lighter canoe."

Mike Romkema a civil engineering (CE) master's student who has served many positions on past concrete canoe teams, explained that the team's innovations will strengthen the canoe by putting the reinforcement where it is needed and not all over the entire hull.

Blair Bates, the industry advisor to the canoe project and president of Building Restoration Inc., a Kalamazoo business that sponsors both WMU and Michigan Tech teams, and **Jeff Day** and **Jeff Braasch**, also from Building Restoration Inc., offered advice to the student canoe builders. "We supply materials, troweling expertise, and whatever they need for this project," Bates said. "We're here to train and support."



John Hannich (left) and **Nick Mannon** review work done on a casting table built with wheels for this year's entry



ASCE crew members prepare a concrete slurry with 60% recycled content of crushed glass and shredded tires to replace virgin materials

Last year, WMU's entry in the 2009 regional competition – the Black Pearl – won third place, the best that WMU has done since it began competing. The pressure is on to do even better this year because several members of the team are graduating. "We want to go out with a bang," Richmond said.

Another pressure is that **WMU is hosting the 2010 ASCE NCRC** at the **CEAS Parkview Campus** on **March 26-28**. In addition to the Concrete Canoe Competition, the 2010 NCRC will also include a Steel Bridge Competition, a Technical Paper Competition, a business meeting, a social event, and other some other friendly competitions. The concrete canoe races are being held at Ramona Park in Portage, MI.

Chairperson for the 2010 NCRC is **Kim Warners**, a civil engineering senior. For more information on the ASCE or the upcoming conference and the competitions, visit <http://www.rso.wmich.edu/asce> or email the organization at wmu_asce_cca@yahoo.com

Send your thoughts or suggestions for future topics to the editor at jerrie.fiala@wmich.edu Thank you.