

Famous forest draws media attention

Media from around the world have picked up on the buried forest story, giving ink to Michigan Tech and its researchers from Canada to London to Australia.

On-line articles have been posted by the Australian Broadcast Corporation, AltaVista.com, ABCnews.com, The Times of London, Booth Newspapers, and Discovery Online. The Canadian Broadcasting Corporation interviewed Professor **David Reed** for its Radio Montreal morning program "Daybreak," and both Booth Newspapers and The Times of London are publishing print articles. Plus, the story has received wide coverage in the local media.

"It's kind of nice when people pay attention to what you do," said Reed, a co-author of the *Journal of Ecology* article on the ancient forest. "A lot of times, that doesn't seem to happen. I have had people call up about Girl Scout cookies and mention it on the phone."

"I did an interview with a Web radio station last week, and I didn't even know there was such a thing," he added. "Thanks to the folks in News and Information Services for their efforts to publicize our work—this wouldn't have happened without them."

BC/BS rep to visit MTU

A representative from Blue Cross/Blue Shield of Michigan will be here on Friday, March 3, and Friday, March 24, to answer your claims questions and address any concerns you may have. The Benefits Office will be scheduling fifteen-minute meetings to be held in Administration 226.

If you would like an appointment with the representative, please e-mail Marianne Wilcox at mawilcox@mtu.edu with a time frame, or call 487-2517.

Board meeting March 10

The Board of Control will meet at 1:30 p.m. on Friday, March 10, in Memorial Union Ballroom B. Among the agenda items is preliminary discussion on the 2000–01 budget. Board meetings are open to the public, and members of the University community are welcome to attend.

*You must be the change
you wish to see in the world.*

—MAHATMA GHANDI

Researchers study 10,000-year-old buried forest

Researchers at Michigan Tech and Harvard have had a unique opportunity to study a 10,000-year-old buried forest, preserved virtually intact in sand and water.

Their findings were published February 21 in the *Journal of Ecology*.* The spruce forest, preserved through a highly unusual set of circumstances at the end of the last Ice Age, was discovered by accident in an Upper Peninsula sand pit. Besides its uncanny state of preservation, it's also extraordinary in its resemblance to certain modern forests.

"The processes have transcended time," said Professor **Kurt Pregitzer** (SFWP), the principal investigator. "It looks like a typical white-spruce forest you could find today near Hudson Bay, where the tree line is advancing north. . . . We believe that the spruce trees that grew on this site were the first trees to colonize the sediment created by the retreating glacier."

While the spruce needles had fallen to what was once the forest floor, most of the trees were upright and intact, including bark and twigs. Mosses, spruce cones, and pollen were preserved on the ground below. Trees ranged from 5 centimeters to 50 centimeters (about 2 to 19 inches) in diameter, and the tallest ones topped 9 meters, about 30 feet. The oldest trees were about 145 years old when they died.

"Most of what we know about changes in forests has come from studies of fossil pollen, buried in ponds and lakes," Pregitzer said. "It's unique to find an entire forest standing, so you can see everything."

The buried forest has particular relevance today, said Associate Professor **Patrick Martin**

(Social Sciences). "The forest was growing at a time when climates were warming, and many believe that's what's happening now," he said. "It was also the time when people first came to this part of the world, so it gives us a snapshot of what the local environment was like then." Paleoindian artifacts, probably dating from the same era, have been found within a few miles of the buried forest.

Professor and Chair **Ted Bornhorst** (Geological Engineering and Sciences) described how the forest came to be preserved. "It takes a real unusual set of circumstances," he said. "The trees were probably killed in standing water. Then they were quickly but gently buried many yards deep in sand carried in small streams running off a nearby melting glacier.

"If you saw those trees standing there, you'd say oh my gosh," Bornhorst added. "The trees still have little limblets, only 1 millimeter in diameter. The preservation rate is really astounding."

The scientists collected 140 tree cross-sections and studied an additional 70 trees at the 5-acre site. Because the forest was discovered below the water table, researchers had to do their work in a few days' time, while water was held back temporarily by dikes and pumps. After the scientists completed their study, the area was allowed to reflood.

The study was made possible by a grant from the National Science Foundation. In addition to Pregitzer, Martin, and Bornhorst, the article's co-authors are Professors **Glenn Mroz**, **David Reed**, and **Peter Laks** and graduate student **Shannon Brown** (SFWP); David

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Provost field narrows, Dobney accepts post at WMU

The Provost Search Committee has narrowed its field of candidates and expects to be issuing invitations soon for campus visits.

"The search is making good progress," said Professor **Robert Keen**, vice chair of the committee. "We hope to issue invitations to candidates within two to three weeks. We'll have at least three, but probably up to five, making official visits to campus."

"The search firm, Isaacson, Miller, has been a great help," he added.

The committee expects that the University will have a new provost and senior vice president for academic affairs on board before fall 2000.

Meanwhile, Executive Vice President and Provost **Fred Dobney** has accepted an appointment as provost and vice president for academic affairs at Western Michigan University, in Kalamazoo. Dobney's appointment, which is subject to approval by the WMU Board of Trustees at its April meeting, will become effective July 1. The departments now reporting to Dobney will report to Tompkins starting on April 1.

Dobney has been at MTU since 1993. From 1987 to 1993, he was vice provost for extended university services at Washington State University.

MTU ParentNET garners Web award

Michigan Tech's ParentNET Web site has received a Web Award from the Web Marketing Association in their 1999 competition.

The site, written by MTU students **April Sundstrom** and **Jamie Kelly**, is maintained by University Relations. The site also includes a listserv (e-mail discussion list), also maintained by University Relations.

The judges of the Web Marketing Association cited the pages and listserv as a "great idea to keep parents informed." The judges also offered some "constructive criticism, that we are going to take to heart," said site administrator **Dennis Walikainen**, director of marketing communications.

This marks the second award that University Relations has received from the Web Marketing Association. The MTU Home Page won an Outstanding Web Site Award in 1997.

The Web Marketing Association was founded in 1997 to help set a high standard for Internet marketing and corporate Web development on the World Wide Web.

What do you think? Survey on Research Services, Accounting

Associate Professor **Sonia Goltz** (SBE) is doing a study of Research Accounting and Research Services, examining workload, resource allocation, and service quality. The study will be used for assessment and planning as the University works to attain Doctoral/Research I ranking in the Carnegie classifications; the project has the support of the unit managers.

The study includes a survey of the units' users. If you would like to fill out a questionnaire and haven't received a copy, contact Goltz at smgoltz@mtu.edu or 487-3075.

MichiganTech

Bill Curnow, executive director, University Relations
Marcia Goodrich, *Tech Topics* editor

To get *Tech Topics* via e-mail, send a message to MAJORDOMO@MTU.EDU saying SUBSCRIBE TECH-TOPICS-L
Information to be included in *Tech Topics* should be submitted to the *Tech Topics* editor in one of the following ways:

- By e-mail to tttopics@mtu.edu
- By campus mail, send typed copies to *Tech Topics*, University Relations.

Each week, the deadline for submitting information is **Friday at 5:00 p.m.** for publication the following Friday.

A snapshot of the 1999 entering class

Center for Teaching, Learning, and Faculty Development

By *William Kennedy*, director



The results from the Higher Education Research Institute annual survey of entering college students are in and aren't particularly encouraging. The data suggest continuing declines in student interest, punctuality, and hours spent studying in high school. At the same time, students reported receiving higher grades in high school in spite of larger numbers of students requiring remedial courses to complete their high school studies.*

Forty percent of the 260,000 students surveyed at participating colleges and universities across the country said they frequently felt bored in their high school classes. Sixty-three percent reported coming late to class frequently or occasionally in high school. Sixty-eight percent of surveyed students said they studied five hours a week or less during their high school years. Forty percent of these college freshmen said they studied less than three hours per week in high school, and 17 percent said they had studied less than one hour per week.

In spite of declining study habits, 34 percent of the surveyed students claimed an A grade point average in high school. Only 13 percent reported A averages in 1969! Eighty-eight percent of surveyed students reported A to B-level grade point averages.

At the same time, 18 percent of entering students reported having taken a remedial course (mostly in mathematics) to complete

**Chronicle*, "Student Stress is Rising, Especially Among Women," January 28, 2000

their high school studies. Nearly 26 percent of students surveyed felt they would need continuing remedial work or special tutoring to succeed in college-level mathematics.

Researcher Linda Sax, director of the survey, speculates that this year's data continue to indicate a growing level of stress among students, particularly women. Nearly a quarter of the students surveyed said that they would probably need to get a full-time job while attending college. Forty-four percent of women students and a third of men said they would probably need to work either full- or part-time during the school year to pay for college.

Nationally, women students spent more time studying, volunteering, participating in student activities, and doing housework and child-care activities than men. Males spent more time than women exercising, playing sports, watching television, partying, and playing video games.

If there is good news, it comes from the finding that the incidence of cigarette smoking (14 percent) and regular drinking (50 percent) in high school is declining. Other studies indicate that the decline in alcohol consumption may actually be the result of a growing divide between students who drink very heavily and another group that abstains from consuming alcohol altogether.

Students continue to select colleges on academic reputation (48 percent), because graduates get good jobs (45 percent), size (31 percent), financial aid offers (30 percent), and tuition rates (28 percent), citing these variables as "very important."

PCW sponsoring bulletin board contest

The Presidential Commission for Women is sponsoring its Fourth Annual Bulletin Board Contest in honor of Women's History Month, with cash awards for the top five displays. Prizes are \$100, \$75, and \$50 for the top three long-term displays, and \$50 and \$25 for the top two short-term displays. The contest is open to individuals, groups, and organizations. The entry deadline is March 15. Judging will be the week of March 27, MTU's Women's History Week.

Photos of last year's bulletin boards can be viewed on the PCW Web page at <http://qhasm.edopp.mtu.edu/pcwworking/>.

The theme of the PCW Bulletin Board Contest 2000 is "Women of the New Millennium." Entry forms are available at residence hall desks, the Office of Student Affairs, and Educational Opportunity. Long-term bulletin boards will be displayed March 20-31 at various locations across campus and the local community; short-term bulletin boards will be displayed in the Reading Room in the MUB the week of March 27-31. Displays will be judged on their informational or educational value; originality and creativity; clarity, consistency, and significance of theme; and design quality.

For more information or an entry form, contact Peg Balachowski at mmbalach@mtu.edu or 487-2938.

Pump up at lunch

Due to the popularity of a noon-time strength training class, the Wellness Office is willing to organize a strength training class in departments throughout campus.

Learn how to do simple exercises at work or at home. If your department is interested in hosting a strength-training class, contact Erin Carter at ejcarter@mtu.edu or 487-2172.

Models of company houses on display in the Archives

The MTU Archives is hosting an exhibit of student-built models of mining company houses from the Lake Superior copper district. The models are built to scale from original drawings housed in the MTU Archives' extensive records of historical Keweenaw copper mining companies.

"I'm overwhelmed with the quality of the models," Assistant Professor **Kim Hoagland** (Social Sciences) said. "It's amazing to see the level of detail that some of the students are able to incorporate into their final product."

The buildings are part of Hoagland's SS422 course, History of American Architecture. They range from a simple, two-bedroom miners' dwelling to the twenty-two-room mansion of Calumet & Hecla superintendent James McNaughton.

Students used a variety of materials in constructing the miniatures, including cardboard, foam core, plywood, poster board, and Popsicle sticks.

This is the third time models from Hoagland's class have been exhibited at the Archives, and Archivist **Erik Nordberg** would like to keep it an annual event. "It's a very innovative use of our historical records," he said, "and a great chance for the public to compare original company designs to existing houses in the area." The Archives will retain a few of the models for long-term display in their reading room, while others will be offered for exhibit in area museums and historical societies.

The models will be on display through March in the Archives reading room located on the third floor of the Van Pelt Library.

For further information, call 487-2505.

Summer athletic camps

Michigan Tech will be offering the following summer athletic development camps this year in hockey, football, basketball, volleyball, tennis, and figure skating. For more information, call 487-2975.

Camps and dates include Hockey Development Center Camp for boys and girls (June 18-August 17); Girls' Basketball All-U.P. High School Camp (June 9-11), Developmental Camp (Grades 7-9, June 11-13), Fundamental Day Camp (Grades 3-6, June 19-22), and Team Camp (July 16-19); Boys' Basketball Team Camp (June 13-16), All-U.P. Developmental Camp (Grades 6-8 June 16-18); Girls' Volleyball Individual Camp (Grades 7-12, July 14-16); Team Camp (JV and Varsity, August 4-6); Boys' Football Developmental Camp (Grades 9-12, June 14-16); Boys' and Girls' Tennis Developmental Camp (June 16-18); and Boys' and Girls' Figure Skating Developmental Camp (August 18-26).

The Peking Acrobats: A colorful spectacle

Submitted by University Cultural Enrichment

You need to see the Peking Acrobats to believe them! And you'll have the opportunity to see this colorful and spectacular show at 8:00 p.m. on Friday, March 10, at the Calumet Theatre. Performing a show that's chock-full of amazing feats of precision and strength, these awesome artists defy the laws of gravity and make the impossible seem easy. From energetic tumbling and jumping routines to towering stacks of tables and chairs balanced with bodies, it's nonstop, breathtaking action that is fun for everyone from ages five to ninety-five. This sensational troupe last visited the area in 1998. Thanks to Michigan Tech's Student Entertainment Board, they are back with a new show as part of the MTU Great Events Series. For tickets call the Performing Arts Ticket Center (487-3200, Tuesday-Saturday, 11:00 a.m.-7:00 p.m.), stop by the Memorial Union Box Office (Monday-Friday, 11:00 a.m.-3:00 p.m.), or purchase tickets online at <http://www.tickets.mtu.edu>.

The Peking Acrobats take simple objects and make acrobatic magic out of them. They climb ropes, juggle porcelain pots big enough to plant orange trees in, teeter on seesaws, and leap through bamboo hoops. In the Tower of Chairs act, the stack of chairs gives the illusion of being glued together. If they're not glued together, how can the performers possibly balance on them? It's only at the end of the act, as the performers and chairs disengage and descend in carefully

choreographed order, that you realize the enormous skill it takes to perform such a stunt. The world famous bicycle routine, as seen on the posters for the show, is always a favorite part of the performance and is easier to comprehend. A cyclist circles the stage and is gradually joined by eight or so of his fellow performers to form a human pyramid. It looks easier than the chair act, but it's still not advisable for mere mortals with any expectation of long life to try at home.

Live music, performed on exotic-looking Chinese instruments, as well as a sprinkling of comedy pieces, provide relief from the intensity of some of the more suspenseful exploits. In addition to their acrobatic skills, these performers obviously enjoy and take pride in what they do. They share jokes with the audience and revel with them in the successful conclusions of their daring acts.

The company is under the direction of Hai Ken Tsai, whose family has turned out master acrobats for three generations. It is such families who keep the 2,000-year-old traditions alive and transform them into modern-day spectacles. Training begins with children as young as 5, who start out by watching the performances. They are taught to follow a rigorous schedule, which continues throughout their lives. The touring company includes performers as young as 9, while the average age tends to be 16 or 17.

For more information, contact University Cultural Enrichment (487-2844).

NCAA II basketball selection shows on Bresnan, WMPL

The NCAA Division II Women's and Men's Basketball Selection Shows, which reveal the 48 women's and men's teams invited to be part of the NCAA II National Tournament, will be aired live on Sunday, March 5, both on Bresnan Cable, Channel 8, and on WMPL Radio, 93.5 FM. The shows can also be heard live via the Internet at <http://www.huskiesradio.mtu.edu>.

Both the Michigan Tech men's and women's basketball teams are in contention for an NCAA berth. The shows will say when and where the tournament games will be played. The women's selection show will run 4:00-4:30 p.m., with the men's show airing 5:30-6:00 p.m.

The selection shows can also be seen on the Sunshine Network, with the men's show airing live at 5:30 p.m., and the women's show on tape delay at 6:00 p.m. The Sunshine Network can be found on DirecTV at channel 632 or on Dish Network at channel 422.

Swing dance classes starting New staff

If you haven't yet learned one of the most popular dances in the country, now's your chance. Or if you know the basics, and want to pick up some new moves, come on down. The Recreation Department is offering swing dance lessons on Thursdays from 7:00 to 9:00 p.m. at the SDC Dance Room 207. This session runs for five weeks and will meet on March 9 through April 6. The cost is \$40 for a nonstudent couple or \$30 for a student couple. If you want to come for just a lesson or two, the cost per lesson is \$8 for student couples, \$10 for nonstudent couples. Sign up at the SDC Central Ticket Office. Class size is limited.

Jose Girbes has joined the chemical engineering department staff as a system administrator. He was previously a part-time student system administrator for the University. Girbes, originally from Valencia, Spain, enjoys skiing and other winter sports.

John Polich has joined the IT Data Solutions staff as a senior data systems specialist. He was previously employed by Bresnan Communications handling management information systems for the Upper Peninsula. Polich has a BS in Data Processing from Northern Michigan University and lives in Houghton.

News you can use

Prevent cancer with diet and exercise

The following article is extracted from a February 18 press release issued by Purdue University.

Poor diet and lack of exercise are behind just as many cancer cases as smoking, says Dennis Savaiano, dean of Purdue's School of Consumer and Family Sciences and professor of foods and nutrition.

"Approximately one-third of cancer cases are related to smoking, one-third to poor diet and lack of exercise, and one-third to genetic or other factors," he says. "Most Americans are already aware of the detrimental effects of smoking, but the rate of obesity and poor diet in this country is cause for alarm."

Savaiano, who chairs the Food and Nutrition Science Alliance, or FANSA, has worked with several organization members to review studies on diet and cancer. FANSA is a joint committee of the American Dietetic Association, the American Society for Nutritional Sciences, the American Society for Clinical Nutrition and the Institute of Food Technologists.

The group issued a statement urging Americans to change their diets to help reduce the number of cancer-related deaths. Savaiano notes that though some types of cancer are more influenced by diet than others, nutrition and food scientists agree that there are four practical diet-related ways to lower cancer risk:

- Eat plenty of fruits, vegetables, whole grains, and legumes in accordance with the U.S. Department of Agriculture's Food Guide Pyramid.
- Avoid empty calories from highly processed foods that are high in fat and/or sugar.
- Choose activities that involve moderate or vigorous exercise.
- Limit or abstain from alcohol.

Savaiano attributes Americans' difficulty in developing a healthy lifestyle to several factors, including lack of knowledge on how to implement specific actions and a lack of marketing forces aimed at creating consumer demand for a healthy lifestyle.

"Many foods that are widely advertised tend to be high in calories and relatively low in nutrients, while few advertisements appear for less processed foods such as vegetables and fruits or whole grains and beans," he says.

Long work weeks also translate into less time for meal preparation, he says, noting that meals often are purchased as takeout or from fast-food restaurants. To effect a change, all food, nutrition, fitness, health, and government organizations must work together to

Retirements

Associate Professor **Donald A. Daavettila** retired from the physics department on February 29. He came to MTU on September 14, 1964.

"Tech has been a great place to live and work, the physics department a friendly and fun place to be, and the students a joy," he said. "And the human resources department took good care of the [retirement] details."

Daavettila plans to "live and play in the local area and enjoy Tech sports and the SDC."

POSITIONS AVAILABLE AT MTU

Job descriptions will be available at 1:00 p.m. on Friday, or by e-mail at <JOBS@MTU.EDU>.

The following positions will be posted Friday, March 3, 2000, at 1:00 p.m. through noon, Friday, March 10, 2000, in the Human Resources Office.

- Custodian—Residential Services Facilities (Regular, part-time position, no base hours; AFSCME internal and external posting)
- Research Associate—Electrical and Computer Engineering
- Assistant Football Coach—Athletic Department (Regular, full-time, ten-month position)
- Assistant/Associate Professor—Civil and Environmental Engineering
- Secretary II N4—Recreation Department (UAW internal and external posting)
- Secretary N3—College of Engineering (UAW internal and external posting)

University employees are reminded to apply in writing prior to noon, Friday, March 10, 2000, to be considered as internal candidates for bargaining unit positions only. Applicants from the recall pool will be given first consideration for non-bargaining-unit positions only. Vacancy announcements are normally posted every Friday at 1:00 p.m. in the Human Resources Office. Complete job descriptions are available in the Human Resources Office or by calling 487-2280. More information regarding employment opportunities is available by calling the Job Line at 487-2895. Michigan Technological University is an equal opportunity educational institution/equal opportunity employer.

March National Women's Month

- 6 Monday**
noon—Strategic Planning meeting with staff—Memorial Union Ballroom A
- 7 Tuesday**
11:30 a.m.—Catch of the Day Spring Luncheon—Memorial Union Ballroom
4:00 p.m.—Strategic Planning meeting with faculty—Memorial Union 105
- 10 Friday**
1:30 p.m.—Board of Control meets—Memorial Union Ballroom
8:00 p.m.—Peking Acrobats—Calumet Theatre

McKay's 3-on-3 Classic hockey tourney this month

The Randy McKay 3-on-3 Classic Hockey Tournament is set to begin March 24 at the Student Development Complex.

Registration brochures are available at the SDC and University Images or by calling 487-2975.

The deadline for submitting team entry forms, along with an application fee of \$35 per player for adult men or \$30 per player for youth and women, is March 15. A minimum of two games and a McKay Classic T-shirt is guaranteed with the entry fee.

Teams consist of four players. Goalies register separately and compete against fellow goalies in a goals against format. Cash prizes will be awarded to winners of the Men's Open, Men's over 35, and College Open Divisions. Trophies will be awarded to all winners.

A Randy McKay scholarship will be given to a graduating hockey player from the Copper Country.

Division dates are March 24–26, Mites, Squirts, Bantam, College Open, Men (over 35); and March 31–April 2, Peewee Travel, Peewee House, High School, Men's Open, Women's Open. For more information call 487-2975 or 487-2578.

Buried forest

Continued from page 1

Foster (Harvard) and Jason McLachlan (formerly of Harvard, now of Duke); and **Douglas Stokke** (formerly of Michigan Tech, now of Iowa State).

The *Journal of Ecology* is one of the journals published by the British Ecological Society, <http://www.demon.co.uk/bes>

* Pregitzer, K. S. et al. (2000) A buried spruce forest provides evidence at the stand and landscape scale for the effects of environment on vegetation at the Pleistocene/Holocene boundary. *Journal of Ecology*, 88, 45–53