BGSU, UT collaborate on wind turbine study

Just six miles outside Bowling Green, off Route 6, four wind turbines rise into the sky. They are the largest turbines in the state that feed into an electric grid, and the focus of a massive collaborative research project between BGSU and the University of Toledo. Faculty and students from both schools are looking at the effects of these turbines on bird and bat migration.

When the conditions are right, about 10 students and faculty members from both schools come to this location at dusk to set up thousands of dollars worth of equipment in the shadow of two turbines. The prime migrating period runs from the last two weeks of September to the first two weeks of October. According to Dr. Verner Bingman, Distinguished Research Professor of biology, the turbines are potentially more of a challenge for nocturnal migrants.

The team from UT is affectionately referred to as "research and development," focusing on the automated detection of birds and bats using radar, thermal imagery and microphones that capture flight-call vocalizations to determine the types of birds in the area. BGSU's emphasis is developing software within the context of automated detection, plus field deployment of the technology with the ultimate goal of creating a database of what these fliers are doing.

"We've been working for about a year and a half," said Dr. Mohsin Jamali, a professor in the UT College of Engineering. "We have grant money to go for three years, but we will look at funding to continue past that. This will be a long-term project."

Jamali hopes to eventually have remote sensors on the turbines that will send data wirelessly back to computers in their lab. He says what their research uncovers could go beyond wind turbines and also help monitor bird strikes on planes.

The multinational group features students and faculty from India, Canada, Iran, Pakistan and Turkey. The team is typically outside for several hours, monitoring the data. Inside a white trailer, a computer monitor shows the pictures coming from the infrared camera. If you watch closely enough, you can make out the flapping of wings.

A high-powered marine radar shows the migratory track of birds, bats and even insects. A yellow dot moving in a relatively straight path across the screen indicates a bird. Jeremy Ross, a BGSU Ph.D. student in biology from Manitoba, Canada, says they are working on improving how data from the radar are being collected and stored, with hopes of field testing in the fall and full deployment during the spring migration.

While looking underneath the turbines, Bingman's students made a surprising discovery. They found dead bats that had obviously been hit by the turbines, while others were in perfect condition. "Those bats have been sent out for analysis," noted Ross. "But it looks like a change in barometric pressure around the turbines caused their lungs to collapse, while birds are better equipped to handle pressure changes."

Bingman says Ohio's legislators are excited about the prospect of putting wind turbines just offshore in Lake Erie, but there are many environmental factors to consider. "We can't just throw them up," Bingman explained. "We're in a major migrating area and it's a big concern, especially in the western basin of Lake Erie. We need to know if these turbines are any more dangerous to birds than a new building going up in downtown Toledo."

"Pre- and post-construction assessments of these turbines are necessary," said Ross. "On a night with a high bird migration, these turbines could be turned off. We also need to look at ways to encourage birds and bats to avoid the turbines."
IN BRIEF

Young People's Concerts begin with 'Wishing on a Star'

The Young People's Concerts series will begin Saturday (Oct. 16) with "Wishing on a Star," a presentation by the musical theater program. The concert begins at 11 a.m. in Bryan Recital Hall of the Moore Musical Arts Center.

Musical theater students will present a special salute to songs from Disney musicals such as "Aladdin," "The Little Mermaid" and "Hercules" in a program that is sure to have everyone singing along.

Admission is $1 for children and $2 for adults and is payable at the center's box office the morning of the event. The box office will open at 10:30 a.m.

The Young People's Concerts are recommended for children ages 5 and up, but younger music fans are welcome to attend. For more information, call the Moore Musical Arts Center box office at 2-8171.

High school students to visit for Music Discovery Day

The College of Musical Arts will hold its annual Music Discovery Day on Oct. 18, beginning at 9 a.m. in the Moore Musical Arts Center.

More than 250 high school students register annually for the daylong event designed to provide students the opportunity to observe a typical day at the Moore Musical Arts Center. High school students interested in majoring in music are encouraged to attend.

Visiting students may attend classes and clinics on music theory and audition preparation.

Students will also learn about the degrees and majors offered and can meet with music faculty and tour the campus.

In addition, students will have the opportunity to learn about available scholarships. Staff from the admissions and financial aid offices will be available to answer questions. Students may register online at https://go2.bgsu.edu/choose/music/discovery.

The event will feature performances by the Collegiate Chorale, Bowling Green Philharmonia and Wind Symphony.

Music Discovery Day is free and open to all high school students interested in pursuing music in college. For registration information, contact Amanda Van Wechel, interim coordinator of music admissions, at 2-8577 or e-mail kmoss@bgsu.edu.

CALENDAR

Monday, Oct. 11
Fall Break. Classes canceled; offices open.

Tuesday, Oct. 12
Fall Break. Classes canceled; offices open.

Wednesday, Oct. 13
Brown Bag Series, "ONE Bowling Green, Fair and Welcoming," presented by Jane Brown, Darlene Bevelhymer and Mary St. John, BG Coalition for Justice, noon-1 p.m., Women's Center, 107 Hanna Hall. In recognition of National Coming Out Week.

Center for Teaching and Learning Workshop, "Championship Teaching: Lessons from Lemov," 2:30-3:30 p.m., 201 University Hall.

Biology Seminar, "Message on the Move: A Full-length mRNA Acts a Long-Distance Signal in Development," with Dr. David Han-
napel, Iowa State University, horticulture faculty, 3:30-4:30 p.m., 112 Life Sciences Building.

Faculty Artist Series, featuring Tina Bunce, mezzo-soprano, and Kevin Bylsma, piano, 8 p.m., Bryan Recital Hall.

Thursday, Oct. 14

Center for Teaching and Learning Workshop, "Pragmatic Practices for Teaching Assistants," 9:30-10:30 a.m., 201 University Hall. Register online at www.bgsu.edu/ctl/page10718.html.

International Film Series, "Sophie Scholl-Die letzten Tag (Sophie Scholl: The Final Days)" (Germany, 2005), 7:30 p.m., Gish Film Theater, Hanna Hall.

MFA Reading, featuring Brianna Lichtenauer, poetry, and Michelle Zuppa, fiction, 7:30 p.m., Prout Chapel.

Vocal Jazz Ensemble, 8 p.m., Bryan Recital Hall.

Friday, Oct. 15

Women's Professional Development Series, "De-Stress for Success," presented by Dr. Craig Vickio, Counseling Center, 1:30-3:30 p.m., Women's Center, 107 Hanna Hall.

Women's Soccer vs. Akron, 4 p.m., Cochrane Field.

Women's Swimming vs. Tom Stubbs Relays, 5 p.m., Cooper Pool.

Saturday, Oct. 16

Women's Cross Country, Falcon Invitation, 10:45 a.m., Whittaker Track.

Men's Cross Country, Falcon Invitation, 11:30 a.m., Whittaker Track.

String Chamber Music Festival, 2 p.m., Kobacker Hall, Moore Musical Arts Center.

Young People's Concert, "Wishing on a Star!," 11 a.m., Bryan Recital Hall, Moore Musical Arts Center. Tickets are $2 for adults, $1 for children, payable at the box office the day of performance. Call 2-8171 for more information.

Choral Concert, featuring the A Cappella Choir, Collegiate Chorale, University Men's Chorus, University Women's Chorus and University Choral Society, 8 p.m., Kobacker Hall. For tickets information, call the box office at 2-8171 from noon-6 p.m. weekdays.

Sunday, Oct. 17

Sunday Matinee, "An Unseen Enemy" (U.S., 1912), and "The Trip to Bountiful" (U.S. 1955), 3 p.m., Gish Film Theater, Hanna Hall.

Women's Soccer vs. Miami, 3 p.m., Cochrane Field.
OCTOBER 11, 2010

BOWLING GREEN STATE UNIVERSITY

Top Stories
In Brief
Calendar
> Job Postings
> Obituaries

JOB POSTINGS

FACULTY

Teaching and Learning. Assistant Professor (two positions). Call Cindy Hendricks, 2-7341. Deadlines: Oct. 15 and Nov. 1, respectively.

Human Services. Assistant Professor. Call Derek Mason, 2-8901. Deadline: Nov. 7.

BGSU Firelands. Assistant Professor (seven positions). Call the dean’s office, 2-0623.
• English Composition. Deadline: Dec. 15.
• English Literature. Deadline: Dec. 15.
• Philosophy. Deadline: Dec. 15.
• Spanish. Deadline: Dec. 15.
• Biology (two positions). Deadline: Jan. 18.
• Political Science. Deadline: Jan. 18.

School of Art. Assistant Professor (two positions). Call the department, 2-2786. Deadline: Jan. 7.

Labor Postings
http://international.bgsu.edu/index.php?x=facinfohires

Contact the Office of Human Resources at 419-372-8421 for information regarding classified and administrative positions. Position vacancy announcements may be viewed by visiting the HR website at http://www.bgsu.edu/offices/ohr/.

Employees wishing to apply for these positions must sign a “Request for Transfer” form and attach an updated resume or data sheet. This information must be turned in to Human Resources by the job deadline.

CLASSIFIED

On-campus classified:
http://www.bgsu.edu/offices/ohr/employment/BGSU_only/page11151.html

Off-campus classified:
http://www.bgsu.edu/offices/ohr/employment/cl_staff/page11145.html

ADMINISTRATIVE

http://www.bgsu.edu/offices/ohr/employment/adm_staff/page11137.html

OBITUARY

There were no obituaries this week.