All eyes on them: Live webcams allow PBSC science students to watch owls 24/7

(BELLE GLADE, Fla. - Oct. 22, 2013) It is a reality show with a different perspective. There is no singing, dancing, mudslinging or outlandish stunts.

Instead, this live webcast at Palm Beach State College in Belle Glade is giving science students a bird’s eye view of the intricate lives and behaviors of one of the most mysterious creatures in the world — the Barn Owl.

Live webcams are installed inside two owl nesting boxes situated on the west side of campus, allowing students to observe the owls’ activity not just during class or on campus, but anytime and from any computer or mobile device. Students as well as the public can observe everything from the owls’ resting patterns and food selections to their interaction with one another and their owlets.

“It’s like being in someone’s house. Instead of seeing a snapshot, you see events 24-7,” said Dr. Vetaley Stashenko, an anatomy and microbiology professor at Palm Beach State who created and supervises the Barn Owl Project. “Students are quite excited to see what the owls are doing and how they’re behaving. One can learn more from live events.”

Stashenko completed construction of the owl nesting boxes last year and then began working with PBSC’s information technology and facilities staff to install webcams. With the new technology, Stashenko plans to transform the educational experience of students and generate research and writing material for science classes at PBSC. He says the scrutiny of real-time owl behavior also can provide data for English classes at PBSC and worldwide.
“With our unique, continuously-interactive environment, we have the potential to provide substantive data. Additionally, we can offer professional interpretation of observed owl demeanor for academic purposes,” Stashenko said. “We’re trying to incorporate this live study of owl performance into all of our biology classes. We intend to assign a certain amount of owl-time observation and then a writing task that will address their observations and conclusions of owl behaviors.”

Stashenko built the 24 by 36 by 18-inch owl boxes with plywood and mounted them on 10-foot poles. Wood shavings were used as nesting materials to pad the floors of the owl nesting boxes. Within a week of installation last year, two owls that normally would nest in natural habitat had populated the nesting boxes. Faculty, staff and students, through a campus-wide naming contest last year, came up with the names Hootie and Luna for two owls that populated the first nesting box (Camera 1). Based on the owls’ unique visible features, Stashenko says that it is clear that Hootie and Luna continue to inhabit the first nesting box, while another pair of owls have made the second nesting box their home.

Stashenko said the second pair of owls have recently mated, and the female has laid seven eggs. The female owl eliminated two eggs that were not maturing, and the parents are now caring for five owlets that hatched this month. Hootie and Luna, however, have not produced any eggs this year or last year.

The owls spend their days sleeping, sitting attentively, grooming or caring for their owlets and their nights guarding their nest and searching for food such as mice or rats. “Owls are nocturnal; they’re not active during the day. At around 6:30 or 7, they start to become active,” Stashenko said.

The Barn Owl Project can go as far as Stashenko and other professors want to take it to help discover information not found in textbooks.

“We’re already finding out very interesting modes of behavior that are not recorded anywhere in the wildlife literature, and it’s very educational,” Stashenko said. “For example, we have discovered that the owls can recognize infrared light from the cameras. We have the ability to change the intensity of that light, and if we manipulate it, the owls will answer or call to the light.”
In addition, he said that while wildlife literature says that owls normally lay eggs between December and March, these owls have shown that is not always the case. “They’re like people. They’re going to behave differently. They’re going to feed from different sources. They differ in how they behave, how they reproduce and how long they stay inside of the box. In the literature, you can’t find this sort of data,” Stashenko said.

A lot can be learned simply by what the owls eat. “When owls eat rodents they do not digest bones or skin. They regurgitate these items in the form of expunged pellets. If we examine these pellets, we can determine the species of rodents that live in the surrounding area,” said Stashenko.

PBSC campus administrators say they are pleased with Stashenko’s work and enthusiasm for the project. “It’s a great project that links the preservation of our ecology with the education of our students in a real life scenario. The best way to learn science is to be immersed in what is actually going on in our environment,” said Dr. Holly Bennett, Belle Glade campus provost.

To view the Barn Owl Project, visit www.palmbeachstate.edu/programs/gladesbiology/owls.aspx.

Serving 48,000 students annually, Palm Beach State College is the largest institution of higher education in Palm Beach County, providing bachelor’s degrees, associate degrees, professional certificates, career training and lifelong learning. Established in 1933 as Florida’s first public community college, it offers more than 100 programs of study at locations in Lake Worth, Boca Raton, Palm Beach Gardens and Belle Glade.

Editor’s note: Contact College Relations and marketing for high resolution photos.

Photo 1: Dr. Vetaley Stashenko, a Palm Beach State College professor, stands near an owl nesting box on the Belle Glade campus. He created and supervises the Barn Owl Project, which includes a live webcast of the activity inside two owl nesting boxes.

Photo 2: A barn owl sleeps inside an owl nesting box at Palm Beach State College in Belle Glade.

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