Tuning in to EAGLE CAM



It took a village to construct a safe nesting place for the pair of Bald Eagles who were about to become Internet celebrities—OG&E to erect the tower at its Sooner Lake Power Plant, Atlas Computers to take the site wireless and Sutton Avian Research Center scientists to create an extraordinary experience for viewers around the world.

A BALD EAGLE FAMILY IN STILLWATER HAS CAPTURED THE HEARTS AND IMAGINATIONS OF ONLINE VIEWERS THROUGHOUT THE WORLD.

By Anne Barajas Harp

igh above an Oklahoma lake, a little family of three went about its daily business, oblivious to the fact that countless people around the world had taken them to heart and were watching their every movement.

The family in question is comprised of a mated pair of Bald Eagles and their fledgling chick, their home a huge nest atop a 50-foot metal pole. They are the unlikely darlings of the Internet, with 3.75 million hits on a Web cam established by the University Oklahoma's George Miksch Sutton Avian Research Center.

In the 1990s, the Sutton Center—part of the Oklahoma Biological Survey in OU's College of Arts and Sciences—

played a key role in removing the nation's symbol from the Endangered Species List by raising and releasing 275 Bald Eagles into the wild. At the time of their efforts, no Bald Eagles were nesting in Oklahoma; more than 100 pairs make their home here today.

"We have had success beyond our wildest imaginings," says Executive Director Steve Sherrod, whose Bartlesvillebased team of wildlife biologists is devoted to finding conservation solutions that work, both for birds and people, through a combination of research and education.

One such solution came in 1994 when Sutton Center Assistant Director Alan Jenkins realized a pair of Stillwater eagles might soon need a new home. The eagles had nested in a dead tree that was slowly falling into the wa-

ter at OG&E's Sooner Lake Power Plant.

"Alan had the foresight to ask if maybe it would be smart to build an artificial platform," Sherrod says. With funding from the U.S. Fish and Wildlife Service, OG&E staff member Erv Warren volunteered to design and manufacture the new tower, which was settled on the bottom of the lake in a concrete-filled tractor tire. The eagles quickly adopted their new digs.

Bald Eagles can live up to 15 years or more in the wild and,

in healthy populations, raise an average of one or more chicks per year, Sherrod says. This particular pair has raised 26 young in 14 years. In 2008, the Sutton Center tried to get a firsthand view of the eagles' behavior by installing a Web cam whose cable was sheathed in a hose and ran under the surface of the lake. The Sutton Center staff soon was astonished to see an unusually large clutch of four eggs in the nest and waited eagerly to see how many would hatch.

Unfortunately, beavers did what beavers do, chewing their way through the first Eagle Cam hose and cable. "Right when the eggs were supposed to hatch, our camera went out on us," Sherrod remembers. There was no chance to repair the camera

cables that season without disturbing the eagles.

Sherrod, who studied nesting Bald Eagles in the Aleutian Islands for his master's degree, says remote cameras have opened a whole new world of animal behavior to scientists.

"The truth is, when I think of the thousands and thousands of hours that biologists have sat in blinds to watch, compared with being able to set up a camera and sit in your office, there's just no comparison. You can see everything and learn so much."

For the 2009 nesting season, Sutton Center educator Ryan VanZant suggested going wireless. A partnership was forged with Atlas Computers of Owasso, which offered solar-powered equipment and many hours of technical support. Atlas helped install two stationary,

nest-mounted cameras—one for backup—as well as a land-based camera that Sutton staff members could tilt, pan and zoom remotely, showing wider views of the eagles flying to and from the nest. The cameras were set to send a wireless signal to OG&E's power plant, which then bounced the signal to OneNet.

"It takes a village to do this. I thought, honestly, when we started that this would be simple. It's not," Sherrod says wryly. Atlas repeatedly came to the rescue when technical problems



The nest-mounted camera records the Bald Eagle couple battling a high wind to feed one chick that has already hatched while keeping watch over the two eggs they hope will complete the family.

arose, from an eagle knocking the camera off-direction with its wing to both solar cameras being disabled for eight straight days by cloudy weather. "Most cinematographers don't have to worry about these things," Sherrod maintains.

The eagles also did their part. In early February, an egg appeared in the nest, followed by two others. The Sutton Center staff was watching carefully. They soon found they were not alone.

Eagle Cam viewership grew rapidly throughout February, followed by a peak of 676,708 hits during the month of March, when the only chick to hatch made its debut. The Sutton Center attracted viewers from 61 different nations, from China to Iceland and even the tiny Tuvalu Islands in the South Pacific.

Two Tulsa television stations and another in Oklahoma City carried live video from the Eagle Cam on their own Web sites. Tulsa's KJRH sponsored a live chat session that quickly built into a community and kept Sutton Center staff busy answering such questions as, "Why doesn't the male eagle stay on the nest to keep the female eagle company?" The answer was that the male's mission was to feed the family. And he was good at his job.

Eagle Cam fans saw the male go above and beyond to provide the newborn's first meal: a half-dozen selections of prey that Jenkins dubbed an "eagle deli." As the Eagle Cam ran 24/7, Jenkins became remote operator of the land-based camera both day and night, giving up many evening hours to make sure viewers had a chance to explore all the beauty of nature.

"There were some very magical scenes to record, such as mornings with water vapor rising from the water's surface during a windless dawn. There were nights during full moons that allowed a view of the eagles on the nest in the pale light; and then there were the sudden and instant flash views of eagles brooding their youngsters at night, illuminated by lightning bolts," he wrote of the experience.

These images struck a chord; \$9,833 in cash offerings came in, making up a portion of the \$30,000 Eagle Cam operation cost. Most expenses were covered by the Sutton Center's corporate partners and foundations or by gift-in-kind donations from the OU Biological Survey.

E-mails began rolling into the Sutton Center at a rate of more than 130 per day. Viewers related how much they loved watching the eaglet grow and made it clear they felt personally connected to the family.

"I cannot tell you the joy that it has brought me to watch 'Whitecap' hatch and develop," a woman wrote. "I have told nu-



Soldier Creek Elementary Teacher Sheri Admire found her special education students' concern for the eagles' well-being spilled over into becoming more caring and nurturing toward each other.

merous folks from Maryland to Iowa to New Mexico about the site, and we have all been awaiting the big flight from the nest."

"I have become fascinated with this entire scenario," another woman confessed. "I can't afford to lose my job over this, but would hope my boss would be simpatico to a new baby in this family if I show him the Web cam!"

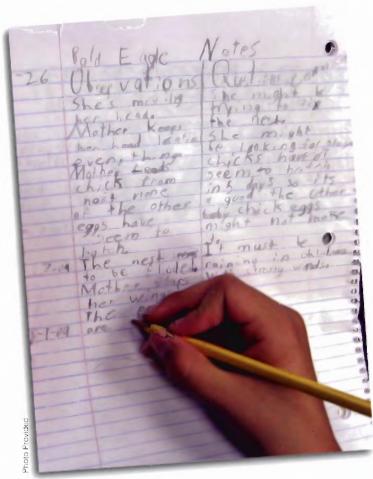
Sutton Center members learned that corporate potluck lunches sprang up around the Eagle Cam, and school classrooms from Utah and Colorado were weaving the eagles into their daily curriculum.

Sheri Admire, a special education teacher at Soldier Creek Elementary in Midwest City, learned about the Eagle Cam from colleagues. The 31-year teaching veteran decided to give the Eagle Cam a try with her students, who range in age from 5 to 11 and have a wide variety of developmental delays and emotional problems. Many lack empathy, have few skills for coping with daily life, or are unable to plan beyond moment-to-moment.

By the time Admire's class began watching, the eaglet had hatched and was sprouting feathers. Within two weeks, she noticed a change in her students. They began asking about the chick frequently, concerned for its well-being.

"I was astonished," she says. "They were reaching outside themselves and being very personal, which for my students is a difficult thing. They were learning to care about something—even something that was a long ways away."

Admire also saw a distinct improvement in the students' academics when she insisted they turn in correct work before viewing the Eagle Cam. One boy with severe behavioral issues ("the roughest, toughest kid we have," Admire says) had always hated school, but the eagles piqued his interest. He started asking about other opportunities to watch nature online and researched



Annelise Slater, a teacher In Utah, was having difficulty interesting her fifth graders in science until Eagle Cam entered her classroom as a vehicle to distinguish between observations and inferences.

nature-based Web cams, reporting his findings back to the class. "The Eagle Cam has tapped into their untapped potentials for learning," Admire wrote to Sherrod. "They have become more caring, nurturing toward each other and are in tune with how others may feel. I want to think that viewing the eagle family daily has something to do with developing the sense of empathy, love and responsibility that the students have been sharing with their classmates."

The Eagle Cam is just one way that the Sutton Center hopes to tap into untapped potentials. The center sponsors numerous research and outreach projects that touch both wildlife and people. Its biologists have produced multi-year studies of environmental impacts on avian life and published definitive atlases of Oklahoma's bird populations.

Tucked away on the Sutton Center's wooded grounds—the former hilltop home of oilman Harold T. Price—is a series of barns that house the stars of the Sutton Center. Slide back the door of an oversized wooden stall, and a Sandhill Crane stands on one foot, waiting for a treat. Behind another, a prehistoric-looking Abyssinian Ground Hornbill stares back placidly, holding a toy rubber tube in its enormous bill. In a third, a handraised Bald Eagle named "BENSAR" gives a cry of welcome so piercing that it reverberates in the human chest. They and a dozen others are featured in "It's All About Birds!," a free-flight show that charms and educates thousands of schoolchildren throughout the state each year with the opportunity to get close to a part



About two weeks prior to fledgling, the eaglet surveys its surroundings as online fans, who have developed a proprietary interest in its young life, eagerly await its leaving the nest.

of nature that most people never see.

For many, the Sutton Center's Eagle Cam was just such an opportunity. Its devoted audience watched for 11 weeks while the eaglet transformed into a fledgling and, on June 16, flew from the nest for the first time. Though—like a college kid—the fledgling would be back for food until it either supported itself or its parents drove it away, viewers were bittersweet.

"We are all a bit sad today," wrote one. "What will we do with ourselves now?"

They will wait until winter, when the Stillwater eagles will spruce up their nest for a new generation, and the Sutton Center will install fresh cameras high above Sooner Lake for all those watching—and learning.

"We want to share the magic of life with people," Sherrod says. "You can tell how hungry people are for this. This is the real thing. If the eagle dies, they see that. If he makes it, they see that. They see him bring in prey; they see him fend off predators. They see the interaction between the parents. They see when the eggs don't hatch or get broken. They see when they get hammered by a blinding rainstorm that soaks everything.

"We want everybody to understand what's going on in nature and to appreciate it. And we're just delighted that we can bring it to them."

Editor's Note: The Sutton Center Eagle Cam video is transmitted online during the late fall through early spring breeding season at http://www.suttoncenter.org/eaglecam.html. In addition to donors already noted, Eagle Cam is sponsored by the Inasmuch Foundation, NatureWorks, the Newfield Foundation, the Anne and Henry Zarrow Foundation and the John Steele Zink Foundation.

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