



**VIDEO VOYEURISM** Fish-eating raptors such as ospreys can be harmed if toxins such as mercury are present in nearby rivers. As part of the University of Montana's Project Osprey, two video cameras have been set up that show, to viewers worldwide, the daily lives of raptor pairs and their young.

DOM MCCARTHER

ranch on the Bitterroot River where the birds have nested for decades. A few years ago he and his wife SuzAnne volunteered to make the nest a Project Osprey study site, equipped with a second webcam that streams live images on the Internet.

"We had more than 300,000 unique hits at our webcam site last year," he says. The Millers heard from viewers as far away as Japan, England, and Australia, and they recently upgraded their camera to high-definition video.

"For years, we've lived underneath this nest, and for years it has produced chicks," says SuzAnne, a naturalist and experienced raptor-watcher who worked in Alaska for two decades before moving back to her home turf in Montana. "But it wasn't until I was able to watch the ospreys' daily movements and distinguish their individual behaviors that I really became attached to them.

"The male would land in the nest with a fish, then lift up the female's wing with his beak to encourage her to get off the eggs," she says. "It was like he was saying, 'Okay, Dear, your turn. Get some fish. I'll incubate for a while.'"

Last year the female laid three eggs, but none hatched. Mercury is a possible culprit. "People around the world were caught up in the drama of the birds continuing to incubate their eggs, waiting for them to hatch, long after it was clear the eggs were not viable," SuzAnne says.

an email from a woman in Estonia," says Greene. "Then we heard from a woman in Wales." The researchers had set up a Facebook page for the ospreys, and in no time it became filled with alerts from concerned visitors. Borrowing a truck equipped with a bucket that can rise to the level of the nest, the biologists raced to the scene to cut away the line from the chick and removed a fish hook embedded in its wing. The bird survived.

Both video streams are accessible via Facebook by searching for "osprey cams." They can also be viewed through the Cornell Lab of Ornithology's "All About Birds" website, which streams live video feeds from nests of ospreys as well as great blue herons, red-tailed hawks, and other birds.

#### BIRDS BECOME TEACHERS

The Montana scientists are amazed that their osprey videos have gone viral. All sorts of unexpected viewers have been drawn to the osprey webcams. One day a speech pathologist in Santa Ana, California, notified the Millers that the entire student body of Garfield Elementary School, 700 strong, was at that moment watching the birds in their classrooms. For nearly an hour afterwards, the students posed questions to the Montana couple via Twitter.

"It was something these kids would typically never be exposed to, because this is a poor, inner-city area," says Charlene Rus,

#### VIEWERS TO THE RESCUE

Operation Osprey's other live-streamed nest was more successful. The structure overlooks the parking lot of a nursing home in Hellgate Canyon near Missoula. One summer hundreds of thousands of people from around the world watched online as three nestlings screamed deliriously at fish deliveries or listened to their parents vent their fury at encroaching bald eagles.

One of the chicks became entangled in monofilament line from a fish brought back to the nest. Fishing line can quickly strangle a bird. It was a Sunday, and the researchers had not been online to check the nest.

"We were first alerted to the fishing line by

the instructor who introduced the webcam to students. "It has become a valuable tool in my work."

When school resumed the following fall, several students told Rus they had watched the ospreys regularly throughout the summer. "These are kids who see gang violence in the alleys behind their apartments," Rus says. "So to be able to have a webcam to take them out of that situation is something the kids have really latched onto." 🐾

*View the webcams:*

Montana Osprey Project

[cas.umt.edu/geosciences/osprey/](http://cas.umt.edu/geosciences/osprey/)

*Note that osprey activity occurs April through September only.*

# REALITY TV, RAPTOR STYLE

Why is the world watching western Montana ospreys via webcams?

BY DOUG STEWART

"INTEREST HAS TAKEN OFF beyond our wildest expectations," says biologist Erick Greene of the University of Montana in Missoula. With his colleague, environmental chemist Heiko Langner, Greene set up video cameras in two osprey nests in 2010 as part of a university research effort called Project Osprey. "What's astounding, judging from our interactions with the people watching, is that 99 percent of them are not scientists or even interested in birds and

other wildlife, but then they get hooked."

The video cameras are, in part, a public-outreach tool of the project, which is gathering data on toxic threats to the birds. Over the years, dangerous heavy metals have leached into local rivers from old mine tailings. The researchers are particularly concerned about mercury that persists in the local environment—a by-product of 100-year-old mining operations in Butte at the headwaters of the Clark Fork River. In the water, mercury

accumulates in fish, then concentrates further in animals that prey on those fish. Half of the osprey eggs laid near stretches of the Clark Fork where mercury levels are highest fail to hatch. The raptors are considered an icon in western Montana, where a minor league baseball team is called the Missoula Osprey.

#### WORLDWIDE ATTENTION

Sterling Miller, a retired National Wildlife Federation senior wildlife biologist based in the Missoula area, lives on a small horse

Massachusetts writer Doug Stewart has written for Smithsonian, Time, Discover, and National Wildlife, where this article first appeared.