

Animal lovers flock to wildlife web streams with Axis cameras.

Wildlife Center of Virginia uses streaming video to educate global fanbase about wild animals.



Organization:
Wildlife Center of Virginia

Location:
Waynesboro, Virginia, USA

Application:
Web broadcasting,
remote monitoring and
teaching

Axis partner:
Johnson Controls

Mission

In 2011, the Wildlife Center of Virginia, a wild animal rehabilitation hospital, took custody of three young eaglets that had developed a following after hatching live on a webcam. The Center installed a camera to keep their fans connected with the birds, but soon the Center was looking to increase their IP video capabilities. They needed high resolution and optical pan/zoom to effectively monitor large flight pens, and they wanted to open more live streaming channels to increase awareness of a variety of wild animal species.

Solution

Working with systems integrator Johnson Controls, The Wildlife Center installed HDTV 1080p-quality AXIS Q6035 PTZ Dome and AXIS P3367 Fixed Dome Network Cameras to upgrade their web streaming program. The AXIS Q6035 cameras allowed the Center to pan and zoom throughout the entire length of the flight pen in stellar resolution.

They were even able to diagnosis an injured owl's eye condition from their office. They opened a total of three live streaming channels featuring different animals, including vultures, hawks and bear cubs, and introduced a moderated chat window alongside the video for discussion with viewers.

Result

The high quality video feeds help the Wildlife Center create an intimate setting where viewers can feel closely connected to wild animals. This connection has contributed to extending the reach of the Wildlife Center's mission dramatically. Viewership of the web channel grew to 39,000 visitors per month from across the globe. People who initially came to watch the eagles soon got hooked on the other animals, as well. The moderated chat spawned an engaged community of supporters who helped raise money for new medical equipment. The Center was also able to expand its educational outreach, as they could connect with classrooms across the country.



From eagle fans to animal lovers

The Wildlife Center of Virginia is an education-focused animal rehabilitation hospital in Waynesboro, VA that has been caring for sick and injured wild animals since 1982. "Our mission is to teach the world to care about and to care for wildlife and the environment," said Director of Outreach Amanda Nicholson. In 2011, three orphaned eagle chicks brought with them a surprise opportunity to expand the reach of that mission.

The eaglets had hatched live on a popular webcam hosted by WVEC-TV at Norfolk Botanical Garden in Norfolk, Virginia. When the mother eagle was killed, the birds were sent to live at the Wildlife Center, and the staff rushed to set up streaming video to keep their fans connected. "It was just thousands upon thousands of people turning to us to figure out who we were and what we were doing with their precious eaglets," Nicholson said.

The Center took advantage of the sudden influx of interest by embracing the possibilities offered by IP video. "The cameras really started directing us into another area of our outreach," Nicholson said. They soon opened new channels to introduce the visitors to other animals under their care. "Many came in as eagle lovers, but they turned into people who appreciate much more," Nicholson said. "Now, it's also about the bears, and the vultures, and the hawks."

Diagnosing from the office chair

Initially, the Center installed fixed cameras with digital zoom, but the lack of detail made it difficult to monitor the full length of the enclosures. "The quality was good when we were nice and wide, but as we started using the digital zoom function, we began to lose resolution and quality," said Kurt Plowman, Secretary, Board of Directors, and the volunteer who led the installation. They tested out an Axis PTZ camera and discovered the high definition resolution they were looking for. "It was a night and day difference with capabilities of the full blown PTZ cameras."

The remote pan and 20x optical zoom functions on the AXIS Q6035 cameras allowed them to see the birds clearly whether they were sitting on their perch or flying through the pen. In one instance, a staff wildlife rehabilitator watching the video feed in the office noticed a Great Horned Owl squinting in an odd manner. From her chair she was able to zoom in clearly enough to diagnose the bird with a corneal ulcer. Other times, the staff has been able to release patients early by observing the animals' behavior without human interference.

"Animals can behave differently when you are standing at a cage looking at them, as opposed to when they are by themselves," Plowman said. "You can get much more natural behavior from the animal if you can watch it from the camera."

Unexpected new skills

Within 2 years, the Center had installed six AXIS Q6035 PTZ cameras and four AXIS P3367 cameras and opened three live-streaming channels on their website. The cameras are connected to NETGEAR GS110TP Gigabit Smart switches by single-mode fiber at the edge and CAT6 cables to an Extreme Networks C2 switch in the core. The video is then converted for streaming and pushed out to the web.

The ease of installation offered by Axis cameras allowed Plowman to keep the network flexible. This was essential because Plowman is a volunteer who works ten miles away, and the onsite staff needed to be able to access and maintain the cameras themselves. "I've gotten more experience than I ever thought I would get hanging cameras," Nicholson said.





Additionally, because it is difficult to enter the enclosures to do repairs, the cameras' reliability ensures the feeds remain up and running. "It's a full job for four people to move bears from one enclosure to the next," he said. "The quality of the product is definitely important to us," Plowman said.

A community of supporters takes flight

The Center opened up a moderated chat window alongside the video streams. An active, engaged community quickly developed. In two years, the site grew to an average of 39,000 visits per month. Some visitors check the cameras first thing every morning. Others remix clips with music and post their creations online. One viewer challenged his fellow "Critter Nation" members to raise a much-needed \$5,000 for the clinic. When they exceeded that amount, the anonymous challenger dressed in a gorilla suit and performed a skit with Center staff live on the web feed. "The cam viewers have a great sense of community," Nicholson said. "They have really just turned into the biggest fans and greatest supporters who are so involved with the Center."

Distance learning made easy

The Center also uses the video and chat window for classroom outreach. In the past, classroom sessions were restricted to car travel only. Now, the Center can connect with students wherever they might be. "We can now do multiple programs with schools all over the country," Plowman said. "We extended our reach well beyond the borders of Virginia."

Since the arrival of the eaglets, the web streams have become an integral part of the Wildlife Center's outreach program. They have connected the clinic with supporters from around the world, and raised awareness about a variety of species and the challenges they face every day. The Center hopes to continue building on the foundation they've created. Next, they are looking to install a bullet-style camera to record surgeries to share with students and other facilities.

"Teaching is at the heart of everything we do," Nicholson said "The Axis IP camera system has definitely expanded our reach. Having so many thousands of people logged in every day from all over the world watching our cams and talking about our wild patients has enabled us to teach even more people about wildlife."

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Axis has more than 1,600 dedicated employees in more than 40 countries around the world, supported by a network of over 60,000 partners across 179 countries. Founded in 1984, Axis is a Sweden-based company listed on NASDAQ OMX Stockholm under the ticker AXIS.

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