

## Trusting Axis to keep out animal intruders.

Zena Communications utilizes Axis network cameras and Jemez analytics in custom bird deterrence solutions.



**Organization:**  
Zena Communications

**Location:**  
Franklin, North Carolina,  
USA

**Industry segment:**  
Commercial

**Application:**  
Remote monitoring, anti-  
trespassing surveillance

**Axis partner:**  
Jemez Technology

### Mission

Initially approached to get rid of frequent gatherings of birds around a residential swimming pool, Jody McLaughlin and his team at Zena Communications began brainstorming ideas to address such a common but unaddressed dilemma. McLaughlin and his team were familiar with camera and analytic combinations and solutions, it was only a matter of determining the best match to solve the problem.

### Solution

Zena's initial plan relied on an Axis camera working in conjunction with motion detection and a set of speakers that would trigger upon movement. With a selection of false alarms, the team had to rethink the process. Tasked with protecting a pond on a vast property from birds consuming all of the fish in the water, Zena took steps to identify a top-of-the-line analytic to increase the accuracy of the solution.

Using a custom version of Jemez Technology's Eagle-i Edge<sup>®</sup>, Zena was able to configure a highly successful technology combination to scare off the herons using an Axis camera, Jemez analytic and further sound equipment.

### Result

Looking at recent results, the end user has over a 92% success rate utilizing this custom solution by Zena. He is able to access the camera feed on his property using AXIS Camera Companion's mobile client and the cost of replenishing fish in his pond has dropped significantly. When the analytic is activated, 10 still shots are taken and automatically emailed to him, giving the end user the capability of tracking the action right in his backyard.

**“We needed the best resolution for the price. We also needed a camera that had an input switch so that we could open and close the circuit to the speakers, plus it needed to fit in a birdhouse. AXIS P1427-E fit perfect for the need.”**

**Jody McLaughlin, Owner, Zena Communications.**

Asked to determine a quick fix to birds flocking to a residential pool, Zena Communications set out to use Axis cameras and several partner technologies to address its customer's issues and create a solution that could be used in future applications.

Once it was determined that an Axis camera could help to identify birds, a property owner in North Carolina called on Zena to protect a pond on his property. The dilemma was that an ordinance requiring him to keep the pond stocked with a minimum level of fish was causing frustration after herons were frequenting the site and consuming the fish.

Jody McLaughlin, owner of Zena Communications, worked on a solution that considered a selection of variables. He took an Axis camera, connected with Jemez Technology to implement their Eagle-i Edge® analytic and attached four analog speakers with an acoustic device from Bird-X to to deter the animals. Eagle-i Edge® runs autonomously in the camera, requiring no additional servers or hardware. Despite a lack of bird recognition software on the market, the overall solution has seen about a 92% success rate since deployment and optimization.

### **Nestled in a bird house**

McLaughlin specified an AXIS P1427-E Network Camera for the site, which the end user approved of and built a custom bird house to host the camera, a discreet setup on his property. “We needed the best resolution for the price,” McLaughlin noted. “We also needed a camera that had an input switch so that we could open and close the circuit to the speakers, plus it needed to fit in a birdhouse. AXIS P1427-E fit perfect for the need.”

The Jemez analytic identifies objects and triggers an event on the camera based on the size and movement of the birds. Though typical motion detection tends to avoid birds, the Eagle-i Edge® analytic is configured to do the opposite in this case. When the event triggers, the circuit is opened to allow speakers to turn on with a specific sound for bird deterrence.

### **Taking flight**

The solution provides an answer for the homeowner and delivers additional and unexpected value on the property. He is able to utilize the camera to watch construction projects on his property and in the sight-line of the sensor using AXIS Camera Companion, and can track when workers are present to make sure they are following through as they claim.

“He has told me there have been no incidents in quite some time,” McLaughlin concluded, “and we've continued to scare the birds away on countless occasions with a high rate of success.”

