

Business Case Bird control laser solves bird problems at electrical substation

Location:	Benton City, Washington, United States
Application context:	Electrical substation
Problem definition:	Bird droppings causing short circuits and damaging structures
Bird species:	Doves (Columbidae) Starlings (Sturnidae)
Bird behavior:	Nesting and roosting
Time of the year with bird problems:	Spring, Summer & Fall
Time of the day with bird problems:	All day with additional pressure at dusk and dawn
Number of systems:	2 x AVIX Autonomic Mark II
In use since:	July 2020
Laser projection area:	8000 sqft
Bird reduction after the laser deployment:	100%







Electrical substation gets rid of birds with laser bird control devices

Birds take over electrical substations

The Benton Rural Electric Association (REA) located in Benton City, Washington is the ideal location for migratory birds, as a feeding, roosting, and nesting ground. This became a problem when birds chose the substation to be their home. Benton REA is an electric cooperative that operates 15 substations across three counties in southern Washington. They recognized that a number of outages were caused by birds nesting throughout the Kennedy Substation. This was a result of the accumulation of bird droppings that would connect sensitive components, cause short circuits, and damage expensive parts of the equipment.

Innovative bird control solution

"We needed a solution quickly. We had experienced a number of outages and were desperate.", says Joel Mietzner, a systems engineer with Benton REA. As a solution, Benton REA invested in TransGard's new high-tech laser bird control devices (manufactured by Bird Control Group). TransGard is an American based company that provides solutions for power outages caused by animals at electrical substations. For 20 years they have prioritised the prevention of power outages from squirrels, raccoons, snakes, birds and others.

TransGard currently protects over 3,000 substations from wildlife in the United States and Canada, offering critical benefits to utilities and their customers. The laser bird control device is an automated system that uses a green laser beam on the concentrated areas where the birds are nesting or roosting to scare them away.

As the green laser beam approaches the birds, they feel threatened and fly away from the area immediately.

Joel Mietzner explored many other bird control devices as a potential solution, however, they had no success with them. Mietzner says "We wanted to do our homework about choosing a solution, but we needed to solve the problem quickly. We contacted TransGard about laser bird defense."

Zero bird-related outages since installation

After deploying the automated laser bird control devices at Benton REA, the birds stayed away. Benton REA was able to keep birds out of the substation without disturbing their migratory patterns The substation managed to achieve zero bird-caused outages since the deployment of the automated bird control devices.

"The birds have learned that the interior of the substation is not somewhere they want to be."

"Every substation has its own needs and challenges, but the Laser Bird Defense was the answer for us."

Joel Mietzner, Systems Engineer with Benton REA