SPR/AGUE

CASE STUDY TRACY AVIARY: PROTECTING PARADISE FOR RARE AND ENDANGERED BIRDS

Zoos, animal parks and sanctuaries must take extra care when designing and delivering pest control solutions. These sensitive facilities require well-defined pest management programs that are environmentally sustainable, target only invasive pests, and protect the well-being of the animals housed there. Often, the best solution is to hire a pest control company who can be solely dedicated to the task.

<u>The Tracy Aviary</u> in Salt Lake City, Utah did just that. They partnered with Sprague Pest Solutions who has years of expertise partnering with veterinarians, curators, animal care specialists, and administrators in crafting prescriptive pest control programs for zoos, animal parks, and sanctuaries. Sprague's work with Tracy Aviary displays their ability on how to protect the facility's world-renowned winged residents.

CHALLENGES

Opened in 1938, Tracy Aviary is the oldest and largest of only two free-standing aviaries in the United States. Throughout its 80-year history it has grown and evolved to today, where it is a highly visible cultural landmark, public garden and leader in environmental education and conservation that attracts thousands of visitors annually. The aviary is home to more than 300 rare and endangered bird species and thousands of bird-loving visitors of all ages.

Unfortunately, the design and operation of the aviary's exhibits – abundant plant and water features, continual free-range feeding of birds and multiple exterior access points – left the Aviary vulnerable to rodents. The aviary's eight-acre complex made for a hospitable environment for Norway rats and mice that were invading the exhibits and preying on the birds within.

Designing a plan to reduce a rodent population in a commercial property is a challenge under normal conditions, but doing so in a sensitive facility with other non-target animals living there requires a holistic approach.

Initially the aviary's animal care team attempted to solve the rodent problem, but quickly discovered that the task was not yielding the desired results and it was taking away their time to care for the birds.

"The rodent infestation was far more significant than we thought and was stressful not only for our animal care team but the threat to the birds was very real," said Kate Lyngle-Cowand, curator of exhibit collections for Tracy Aviary.

The rodents impacted multiple exhibits. Rats were gaining access to the South American exhibit through openings in the mesh screening and were enjoying the readily available food and began to prey on the tropical birds inside. To safeguard the birds, the animal care team had to move them to a secure area that was more protected and off display to guests.

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Curator of exhibit collections Tracy Aviary In the wetlands display, rats were burrowing underneath the displays, trying to make a home for themselves. In the rain forest area, burrowing mice were consuming plant-life, threatening the health of the rare plants and trees. In addition to the physical threat and damage the rodents were causing, the animal care staff was concerned about the diseases rodents could be introducing that could affect the endangered birds housed there.

The Aviary knew it had to act quickly.

"Not only were our birds at risk but our guest experience was negatively impacted with us having to move birds off display to protect them," said Lyngle-Cowand. "The consequences if we didn't find a solution would have been significant for the aviary."

SOLUTIONS

The Aviary knew that they wanted a pest control partner that shared their holistic approach to the health and well-being of the resident animals. After reviewing options, they chose Sprague whose programs prioritizes proactive pest solutions and utilizes targeted applications supported by monitoring devices.

"Sprague's approach to solving the problem mirrored ours when it came to animal welfare and sensitivity to the environment," said Lyngle-Cowand. "They took the time to listen and learn, and we felt comfortable that Sprague could adapt to what was needed."

Multiple Sprague team members including Director of Operations AJTreleven, ACE; Salt Lake City Branch Manager Lindsey Marker; and several members of the Sprague entomology team walked the property to assess the situation and formulate a plan based on each building or exhibit's specific needs and circumstances.

"We started with remote monitoring to measure the severity of the infestations and to gather valuable data points on where and when the activity was taking place," said Marker. "A lot of time was invested to research the appropriate products and methods to alleviate any concerns the animal care staff had regarding the impact our services would have on the animals."

Once the plan was approved, Sprague started with a targeted CO2 burrow treatment to remediate the rat pressures in the South American exhibit. There was heavy emphasis on exclusion, structural/cultural adjustment, and if needed, trapping. Using only targeted solutions to avoid secondary exposure of non-target animals.

Sprague continually reviews data and adjusts the program to match the unique requirements that come with delivering an effective rodent control program where there are other non-target animals close by. For instance, there can be no exposed snap traps within the exhibits in case an unsuspecting flamingo or rare Guam kingfisher (sihek) encounter one.

Close collaboration and communication with the aviary's animal care, horticulture, and facility maintenance teams is also a key component. Sprague's entomology team regularly shares information on rodent behavior and makes recommendations on how habitat construction/maintenance and set up (i.e., repairing holes in mesh screening, sealing openings to the outside, free-range feeding and water sources, etc.) can contribute to rodent pressures.

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Curator of exhibit collections Tracy Aviary Lyngle-Cowand said the learning process between the two teams is a two-way street.

"Our animal care team has learned more about rodents than they ever imagined, and Sprague's team is gaining extensive knowledge about what it takes to care for rare and endangered birds," she added. "It's an excellent partnership."

RESULTS

The results from the twice-a-month service visits and strong collaboration between Sprague and the Aviary teams have been positive. There has been a notable reduction in rodent pressure and sightings in the exhibits and the predation of the birds has also ceased.

"The holistic approach and care Sprague took in designing the program, along with their willingness to listen and be collaborative partners has made all the difference in its success," said Lyngle-Cowand.

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