Endangered songbirds prefer a Dyson fan

July 12 2016

Credit: Florida International University

Some fans are quiet, but weak. Others are powerful, but noisy.

According to Dyson, their Air Multiplier fans are quiet and powerful.

Perhaps that is why one of the world's most endangered birds prefers a Dyson.

Residing exclusively in Central Florida, less than 100 male Florida Grasshopper Sparrows remain in the wild and the number of elusive females is unknown. Last year, officials from U.S. Fish and Wildlife Service gave approval for seven of the tiny songbirds to be taken into captivity under the care of researchers from FIU's Tropical Conservation Institute, a collaboration with the Rare Species Conservatory Foundation in Loxahatchee, Fla.

Creating an ideal habitat was a challenge for scientists since the species has never been reared in captivity before. The birds are very small, with adults weighing about an ounce. So when TCI researchers built out a home for their seven new residents, air circulation was a bit problematic, especially considering how noisy fans can be.

After several failed attempts of placing fans near the enclosure, TCI Director Paul Reillo decided to give Dyson a try.

Dyson fans are engineered with airflow paths that eliminate the need for fan blades and create an uninterrupted stream of smooth air. For their low sound output, the fans have been awarded the Quiet Mark designation by the Noise Abatement Society.

Credit: Florida International University

Earlier this spring, a Dyson AM07 tower fan was placed alongside the Florida Grasshopper Sparrow enclosure, circulating fresh air through their custom habitat. TCI scientists waited anxiously to see if the tiny birds would tolerate the high-tech fan. To their surprise, not only did the rare birds tolerate it, but the area around the fan became a favorite

hangout spot.

"The Dyson fans produce a steady breeze while generating only white, background noise, very similar to the sound of wind passing over the Florida prairie grasses," Reillo said. "With no externally moving parts and no vibration, the fans can be placed directly in front of the sparrow enclosures. The birds love them."

With such great success, Reillo and his team are now working to replicate the enclosure. To support TCI's efforts, Dyson donated four additional fans to help create happy and peaceful homes for more of the endangered birds. The donation came just in time, as TCI announced earlier in May the arrival of four little hatchlings—the first successful captive breeding of the species. Weighing approximately 2 grams when they hatched, the four young sparrows also appear to be quite comfortable around the Dyson. Not long after, the nursery grew as more hatchlings moved in after U.S. Fish and Wildlife officials showed up with recovered eggs that have since hatched. Recent flooding in the Central Florida prairie had threatened to wipe out their nests, leaving no choice but to move them to TCI to save the hatchlings.

"The Florida Grasshopper Sparrow's resilience and efforts reward ours, and we are thankful to the dedicated Tropical Conservation Institute researchers and Rare Species Conservatory Foundation staff, along with our committed program partners that have all united with U.S. Fish and Wildlife Service's efforts to save this species," Reillo said. "We are very grateful to Dyson for the cooling fans in the sparrow house and also Timberline Fisheries, which has supplied all the insects fed to the birds. Their efforts are helping to ensure a healthy life-support system for our important, tiny charges."

Aside from the biological challenges of breeding such a delicate species in captivity, funding is also a challenge for researchers trying to save

species. FIU's Tropical Conservation Institute relies on a series of grants and in-kind donations to cover the nearly $120,000 in annual costs to sustain the captive breeding program for the Florida Grasshopper Sparrow. But as Reillo points out, the financial cost is minor when compared to the cost of losing an entire species to extinction.

Provided by Florida International University