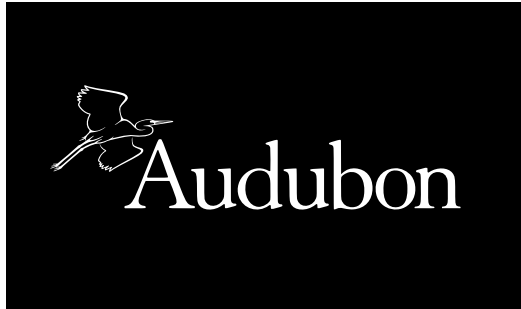


Audobon Society's Starr Ranch Sanctuary Case Study



History

Starr Ranch is a 4,000 acre preserve owned and operated by the National Audubon Society. It is located in the foothills of the Santa Ana Mountains in the mild and semiarid climate of southeastern Orange County, California, approximately 60 miles southeast of Los Angeles. The Ranch lies in a sparsely inhabited region with active wildlife, bordering the Cleveland National Forest on the north and east, the Ronald W. Caspers Regional Park on the south and the developments of Dove Canyon and Coto de Caza on the west.

Pete DeSimone has served as manager since 1988, overseeing the ranch infrastructure, fundraising programs, conservation work and other duties important to the daily functions of the non-profit National Audubon organization. Sandy DeSimone (Pete's spouse), serves as the director of research and education, and is responsible for habitat restoration and research at Starr Ranch.



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- Pete DeSimone.

Situation

Starr Ranch Sanctuary initially launched the streams using an internal Audubon server based at a New York office. DeSimone mounted cameras at nest locations for the purpose of attracting viewers on a public interest level. Viewers took a particular liking to the barn owl cams, which offer two simultaneous, 24/7 streams (one with audio) from different viewpoints.

A growing number of visitors began to access the barn owl streams. Audiences increased after sunset as the adult owls swooped in and out of the nest with prey items for the young owlets, feeding voraciously through the overnight hours. With YouTube streams and other social media

building buzz, traffic soon escalated to a point where the New York servers couldn't reliably handle the load.

"There was one instance when a reasonable number of viewers overloaded the server and the streams went black..." said Pete DeSimone. "I knew we would need to accommodate larger audiences moving forward, especially with a big event planned at the ranch. We simply can't afford to miss the opportunity of losing return visitors and potential donors because the streams were down. That's when we began talking to StreamGuys."

Solution

StreamGuys configured a custom streaming platform for Audubon on short notice to support the traffic increase. The additional capacity has allowed Starr Ranch Sanctuary to accommodate at least twice the amount of concurrent visitors based on the existing customer agreement. The streaming platform is also built for scalability should Starr Ranch Sanctuary need to accommodate additional traffic for future streams.

Two dedicated encoders capture the live web cam signals and deliver them to the StreamGuys platform, which instantly streams the content to the web. StreamGuys provides the required chunk of bandwidth to deliver ideal video quality for the customer's needs (approximately 15 frames per second, at bit rates peaking near 150 kb/s). Buffer rates were massively reduced, decreasing from 10-15 seconds to less than three.



Benefits

Teaming with StreamGuys has provided Starr Ranch Sanctuary a robust and reliable streaming platform that accommodates hundreds of viewers for a very reasonable cost, which is important for a non-profit agency. DeSimone added that working with a streaming media provider has also simplified the process of accommodating and entertaining his website visitors. Meanwhile, StreamGuys is providing a series of monitoring and reporting features with the service that allow DeSimone to view and record the number of concurrent and total viewers that have visited the site over

any period of time. This allows him to continually evaluate how the current streaming operation is handling bursts of traffic. StreamGuys is also testing new encoding solutions that would allow Starr Ranch to expand to mobile smartphones and other devices, while discussing the cost and technical benefits of the streaming project with other National Audubon locations around the country.

“The service is reliable, which is very important to our operation since the barn owl streams have become very popular. The audience continues to grow, so we needed to outsource the streaming operation to a company like StreamGuys so we can offer a strong service. They have provided excellent customer support while offering a solution that fits within our budget.”