POWER PROFILE

Customer: Natural Bridge Wildlife Ranch

Location:

San Antonio, Texas

Customer Business Issue:

Standby power to support wildlife needs

Solution:

Cat[®] D60 GC, D100, D100 GC, D150 GC generator sets

Cat[®] Dealer:



Children peer at wildlife up close at the Natural Bridge Wildlife Ranch's drive-thru safari. Cat[®] GC generator sets provide backup power, guaranteeing a reliable source of heat and water for the animals.

POWER NEED

Located in the Texas Hill Country north of San Antonio, Natural Bridge Wildlife Ranch is an African safari-style wildlife refuge.

Open to the public since 1984, about 450 acres of rolling hills, creek beds, and magnificent oak trees greet visitors along the safari drivethru. The trek covers over six miles and takes anywhere from one to two hours. Admission permits visitors to take multiple trips through the safari, as every trek provides different adventures in the free-roaming environment. Feeding options are available when tickets are purchased upon arrival.

Riding in a custom-built Safari Rover or Safari Shuttle, visitors can take the guided Safari Adventure tour if they choose not to travel in their own vehicles. Official adventure guides are animal specialists who work in a handson environment to oversee the animals' care every day. Safari Adventure Trek Tours provide a venue for enhanced experiences, as guides offer fun and interesting facts about the animals, management, and heritage to provide an enhanced perspective on the Texas-style African safari.

Additionally, the Walk-A-Bout area features several bird and primate species, a family of giraffes, the Safari Camp Grill, and the Safari Trading Post gift shop.

Named as one of the Top 10 safari parks in the nation by USA Today, Natural Bridge Wildlife Ranch provides habitat for more than 500 animals representing over 40 species from around the world. This includes reticulated giraffes, white rhino, kudu, sable, as well as ostriches and primates.

Owners Ray and Trudy Soechting obtained some animals from zoos, and others were purchased from exotic animal breeders or imported. Over the years, the Texas Land Heritage Property has diversified into a source of both education and conservation of endangered and threatened species.

"Most of the species here are endangered to some degree," says Marketing Director Tiffany Soechting. "We focus on species that are in need of preservation and protection."

The reticulated giraffe, also known as the Somali giraffe, is a giraffe subspecies native to the Horn of Africa. It lives in Somalia, southern Ethiopia, and northern Kenya. There are approximately 8,500 individuals living in the wild. The reticulated giraffe is considered endangered due to an estimated continuing decline of 56 percent over the last 30 years. The decline is most likely attributed to habitat loss, deterioration in habitat quality, and illegal killing/poaching.

One of the star attractions at Natural Bridge Wildlife Ranch is Buddy, a 10-year-old giraffe who made international news when he was born in 2013 as part of only the ninth known set of twins in the last 200 years.

"When it happened, there were stories from Australia to India," Tiffany recalls. "They were featured in Times Square and were on *Good Morning America*.

"With twins, the mother (giraffe) could not produce enough milk to raise both of them on her own. So, we made the decision to handrear Buddy. And as a result, we connected with giraffe caretakers and conservationists all around the world."

Natural Bridge Wildlife Ranch is affiliated with organizations such as the Conservation Center for Species Survival and Save the Giraffes. Because of the close contact that visitors to the wildlife ranch experience with the animals, Soechting says they're left with a deeper sense of connection.

"Because the animals are roaming free while our guests are driving through their environment, the animals have the ability to come up and interact with the visitors," she says. "And when they come into close contact with that animal, it fosters a connection on a deeper level. So, when they have an up-close interaction with a giraffe, they're more likely to help support the conservation efforts for that species."

SOLUTION

Both the animals and the retail operations at Natural Bridge Wildlife Ranch require a continuous source of power, says T. Dexter Soechting, director of animal care and operations.

"For the animals, we have to provide everything from shelter, clean water and feed, and we need a consistent supply of power to maintain these basic necessities," he says. "And power is required in a shelter for heat

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and to pump water. So, having a reliable source of power is crucial, especially in bad weather."

In January—the coldest month of the year in San Antonio—the average low temperature overnight is 43 degrees, which is sufficient to support the majority of the animals that originate from warm climates. However, when temperatures drop below freezing, the animals can be at risk.

"Three years ago, when we had the bad storm, we didn't have generators for our animal side; we just had propane heaters, so it was very stressful," T. Dexter said. "We had rolling blackouts and it was hard to sleep at night knowing that the power could just quit at any moment, and the animals would lose heat."

Since then, the wildlife ranch has installed four Cat[®] diesel generator sets to provide backup power to the ranch. It recently added a new Cat D100 GC genset to provide backup power to its pump station, as well as a D150 GC generator, which provides backup power to the Walk-A-Bout area. In the event of a grid outage, Natural Bridge Wildlife Ranch is almost entirely backed by Cat standby power.

"A representative from Holt CAT came out and walked us through everything," T. Dexter said. "We have our own mechanics who service the generator sets, and Holt CAT was very helpful in training our service team—they showed us how to do everything. And they programmed the generators so they start and run automatically every week as part of regular run-ready testing."

RESULTS

Recent meteorological events provide evidence that Texas is prone to weather extremes. The extended "Snowmageddon" winter storm that occurred during Valentine's Week 2021 brought not only snow, sleet, and freezing rain to Southeast Texas, but also extreme cold temperatures that lasted for several days and resulted in rolling blackouts and extended power outages.

"We didn't lose power during the storm, so we were very lucky," Tiffany recalls. "But we didn't have the Cat generators, and it was very stressful because basically the entire state was experiencing rolling blackouts. We had to go around and check to make sure that the propane heaters still had fuel, even in the wee hours of the morning. And we had to travel 20 miles in the snow and ice to refill the propane tanks. "But now that we have generator sets in place, it makes a huge difference knowing that the animals are protected during these weather events—it allows us to sleep at night."

In February 2023, Holt CAT installed Cat Connect remote asset monitoring on all four of the generator sets at Natural Bridge Wildlife Ranch. Remote asset monitoring technology monitors the status of the generator sets 24/7, enabling staff to receive:

- Continuous data on engine and electrical parameters
- Real-time alerts and alarms
- Engine or generator faults that signal a potential shutdown or failure to start

Cat Connect can monitor essentially an unlimited number of generator sets at remote sites and display them all in a single dashboard view. It can synthesize data across multiple sites and geographic areas and help users compare the performance of sites and individual assets.

Cat Connect remote asset monitoring provides an added layer of security.

"With all the steep hills here on the ranch and the distance we have to cover, if we have an ice storm here, it will be nice to pull up the Cat Connect app on my phone and check the status and fuel levels of our generators," T. Dexter says.

"In an adverse weather event, there are endless things that we're trying to fix and get going. So, when it comes to our generators and knowing in real time about their ready-torun status, having that off our plate is a huge relief."



A new Cat D100 GC generator set provides standby power to a pump station in the event of an outage.

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