ON-SITE GREEN **TRANSPORTATION**

BY HILLARY RICHARD

When it comes to **ENVIRONMENTAL** some of the **BIGGEST IMPACTS** come **SURPRISING EVERYDAY CHANGES.**

An increasing number of Association of Zoos and Aquariums-accredited facilities have discovered that making their on-site transportation more green has become both a way to help offset climate change and a way to lead their communities by example.

Conservation, preservation and sustainable business initiatives overlap in so many ways that it can be challenging to choose one streamlined cause at a time and get everyone on board. In addition to logistics, switching to environmentally friendly transportation can have the typical hurdles of any new program: high upfront costs, unforeseen repairs, reluctance to change, an unknown success rate and an adjustment period. Without minimizing their complexity, these issues can be surprisingly simple to solve. Partnering with local energy companies or vehicle and bike dealerships can solve many of the financial quandaries, while public educational programs and staff familiarity training can ease the rest. As these five zoos across the country show, incorporating green transportation can happen at every level.

Woodland Park Zoo in Seattle, Wash., initially adopted eco-friendly transportation for practicality and health reasons. They couldn't drive their fleet of vehicles around the Zoo without causing noise pollution, air quality issues and traffic jams. Today, staff members use a fleet of 18 three-wheeled trikes with baskets to transport everything from food for the animals to tools. They cover 15,000 miles annually, offsetting about five metric tons of carbon per year. There was an unexpected bonus: visitors loved the fun factor the trikes added.

In 2009, Woodland Park Zoo was 45 percent alternatively fueled. Now, thanks in large part to the trikes, that number has jumped to 65 percent. The Zoo also uses 20 electric carts throughout its campus—some of which can be charged by solar panels on the property. The emphasis on green transportation even extends to the Zoo's security guards, who use bicycles for patrols and emergency response.

"We've had a green mindset for quite a few years at the Zoo. More recently, our focus has been shifting to how we can encourage behavioral change for visitors. Our push going forward is on the transport and mobility side, like making bike transit to and from the Zoo more appealing, improving the bike racks, and making more charging stations for electric cars," said Zosia Brown, the resource conservation and sustainability supervisor at Woodland Park Zoo.

To entice guests to go green, the Zoo currently offers a discount for visitors who arrive via public transportation, with plans to extend that reward to people who arrive by bike, as well. In the parking lot (which has two vehicle charging stations), guests with electric vehicles get preferential parking.

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In spring of 2017, Utah's Hogle Zoo in Salt Lake City, Utah, partnered with Utah Clean Energy to provide an electric vehicle incentive program for the community in an effort to do something about the city's notoriously poor air quality. For six weeks, the Zoo ran a campaign that connected the relationship between air quality and wildlife conservation, which resulted in residents purchasing 70 electric cars and several electric bicycles. The Zoo now uses an electric car as its main errand vehicle in an effort to keep up community interest in alternative energy. So far, it's been working.

"People were making the switch quicker than we were getting charging units in. We've had a few hurdles to work through, but for the most part it's been pretty smooth," said Liz Larsen, director of conservation at Utah's Hogle Zoo. The Zoo is currently creating additional free public charging stations to add to its two staff parking lot chargers. Five staff members—including Larsen—now own electric vehicles.

Most of the Zoo's on-site utility carts are already electric, but in 2018, Hogle

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"The Indianapolis Zoo has taken **ALTERNATIVE FUEL** a step further by converting its café's **COOKING OIL** into **BIOFUEL** for its vehicles."

Zoo plans to add more electric vehicles as well as electric bikes, which would help staff members navigate the internal space of the Zoo more efficiently.

"Zoos are well-positioned to accelerate changes like this in general because they have such diverse audiences. We bring people together from different parts of the community, so we're able to reach different people in new ways," said Larsen.

The Indianapolis Zoo in Indianapolis, Ind., has taken alternative fuel a step further by converting its café's cooking oil into biofuel for its vehicles. The Zoo has the ability to create up to 500 gallons of biodiesel per year thanks to a 2015 partnership with Cummins, Inc. that focused on alternative energy. The Zoo already runs fully on green-powered electricity, so reducing emissions seemed like a logical next step in lowering its carbon footprint.

According to Melanie Laurendine, the conservation public relations specialist at the Zoo, getting the community to feel involved is a key to encouraging them to adopt a greener way of life at home.

"Our community looks to us. We want to be a leader in conservation in green practices, to encourage people," she said. "Even when a guest is doing something as simple as enjoying French fries here, they become part of a bigger picture for us. We have signage in our cafés so it's something unique that our guests enjoy being a part of."

Sustainable transportation efforts can become remarkably intricate these days, but sometimes, they're as simple as adding bicycles to cut down on staff vehicle use. In 2012, the San Francisco Airport donated bikes from their airport bike program to the San Francisco Zoo in San Francisco, Calif. There are now about 30 bikes in the Zoo's employee bike share program, divided up by department.

"It works out really well. People love it. Guests love it. Morale increased and productivity went up. We're a 100-acre Zoo, so if you work here and don't have a golf cart or a bike, you're walking," said Chris Connors, vice president of operations at San Francisco Zoo, which will be focusing on instituting a groundwater recycling program and introducing wind power in the near future.

At Zoo Miami in Miami, Fla., pedal power does double duty by making guests happy and generating revenue. As part of the Safari Cycle program, visitors can rent specialized two-, four- and six-passenger covered bicycles to navigate the Zoo's 330 developed acres and three miles of walkways. On busy days, it's not unusual for all 194 bikes to be in use.

"The bikes are an ideal option because Zoo Miami is located on a large, flat piece of property. They provide a good workout, since they're quite heavy and require some serious pedal power," said Ron Magill, communications director for Zoo Miami. Profits from the cycle rentals support the Zoo's monorail and tram systems. The Zoo is currently considering adding a zipline to its green transportation initiatives as a way for guests to quickly get from one end of the property to the other.

These organizations all reported overwhelmingly positive reactions to their green transportation initiatives, and noted that both staff members and zoo visitors seem to feel more connected to their own environmental responsibilities when they see sustainable initiatives in action.

"Climate change is not an abstract issue," said Liz Larsen. "Hundreds of animals are already on the endangered species list for threats related to climate change. Knowing we're helping nudge the needle locally as well as being part of the greater solution of adopting alternative energy is really important for any zoo."

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