



The Akron Zoo in Ohio has been an Association of Zoos & Aquariums (AZA) accredited organization since 1989. The AZA is dedicated to the advancement of conservation, education, science and animal welfare, and the Akron Zoo exemplifies this dedication. Since the 1990s, the Akron Zoo has doubled in size and increased the number of animals under their care by 200 percent, all while providing educational opportunities and conservation efforts. In addition to donating to local, regional and global conservation initiatives, the Akron Zoo implements green practices at their facility with the help of a Rice Lake Weighing Systems RoughDeck® floor scale.

The Akron Zoo believes sustainability efforts and green practices require constant improvement as new technology and opportunities develop. Since 2011, the zoo has made notable contributions to their sustainability efforts, including changes to their water and energy usage and added recycling, compost and trash-sorting stations to their green certified restaurant, Komodo Kingdom Café. They also implemented a "zero waste" policy, no longer allowing Styrofoam™ or plastic flatware to be used on-site. The Akron Zoo didn't stop there.

In keeping with the "zero waste" mindset, the Akron Zoo wanted to find a way to handle their compostable waste. Enter: Big Hanna. A Swedish-made composter that aerates compost materials by turning over the pile, Big Hanna machines reduce the buildup and release of the greenhouse gas, methane. Pound-for-pound, methane is 20 times more damaging to the environment than carbon dioxide. While compostable materials naturally break down over months in a landfill, the oxygendeprived environment will release methane gas. The Big Hanna at Akron Zoo creates salable compost, with little to no methane gas released, in four to six weeks.

Akron Zoo employees use Big Hanna to expedite the composting process by shredding or grinding compostable materials. Exact amounts of carbon, nitrogen, water, and sawdust or woodchips are also added, depending on the weight of materials. The Akron Zoo needed a very specific scale system to help in this green endeavor, and when they brought their problem to Rich Vanaman at Filing Scale, it didn't take him long to find a solution.

Mr. Vanaman had previously installed Rice Lake Weighing Systems' RoughDeck SS stainless steel floor scales to weigh grizzly bears and lions at the zoo. Using another Rice Lake floor scale was the obvious choice since the existing scales had performed so well. A standard-duty floor scale wasn't the perfect match for the Akron Zoo this time. However, as Mr. Vanaman knows, if a standard scale doesn't quite fit the application, Rice Lake can make a custom scale system.

A custom RoughDeck floor scale was designed to support the zoo's utility vehicle, which hauls the compostable material from around the zoo to the Big Hanna building. Almost like a truck scale in miniature, complete with yellow guiderails, this custom RoughDeck has a ramp for the vehicle to back up onto the elevated floor scale. The scale needed to be elevated to allow the hopper on the vehicle to meet the height of the grinder connected to Big Hanna. After the vehicle backs onto the custom RoughDeck floor scale, a 480 Legend® Plus digital weight indicator shows the weight of materials being dumped from the hopper into the grinder. Once zoo employees know the weight of the compostable materials going into the grinder, they can easily determine the proper amounts of carbonaceous material to add and achieve the proper ratio for the aerobic composting process.

With the help of a custom RoughDeck floor scale system, the Big Hanna composter has the Akron Zoo going green. ■

The custom RoughDeck floor scale weighs a utility vehicle as it unloads materials into the hopper. Weighments are used to determine proper amounts of supplements necessary to expedite the composting process.

