

## **BRINGING A NEW LEVEL OF GREEN TO THE NUTRITION CENTER – THE ROAD TO ZERO WASTE CERTIFICATION AT DISNEY’S ANIMAL KINGDOM**

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### **Abstract**

The Animal Nutrition Center at Disney’s Animal Kingdom received Zero Waste Certification from the US Zero Waste Business Council at Platinum Level in 2016. Inspired by the Walt Disney Company’s environmental stewardship goal to divert 60% of waste from landfills and incineration by 2020 as well as the Zero Waste Certification of the Land pavilion at Epcot, the Animal Nutrition Center started the journey to Zero Waste in 2015. After an initial measurement of 95% landfill diversion due to long-standing internal practices, the area began quarterly measurements to determine the baseline value for one year. Each quarter, measurements of total trash generated and amount of trash diverted from landfill were reported for seven consecutive days. The average percentage of trash diverted from landfill recorded for each quarter was over 95%. These values, as well as documented efforts to reduce, reuse, and recycle, helped to qualify the Animal Nutrition Center for Platinum level Certification, which was awarded in September of 2016.

### **Introduction**

The Animal Nutrition Center at Disney’s Animal Kingdom has always aimed to limit the amount of waste going to landfill. Diets are prepared in reusable containers, washable hand towels are used in place of disposable paper towels, wooden pallets and cardboard boxes are reused in addition to recycling and other programs designed to divert items from landfill. Zero Waste Certification by partners at the Land (at Epcot) inspired the nutrition team to pursue their own certification with the US Zero Waste Business Council. Zero waste certification with the US Zero Waste Business Council is based on a multitude of criteria. In order to begin the certification process, an operation must record trash diversion from landfill and incineration over a 7 day period and average over 90% diversion rate. Once the 90% diversion rate is reached, measurements must be conducted quarterly for a one year period with diversion rates maintained over the 90% threshold.

### **Methods**

The Animal Nutrition Center has employed strategies to reduce their environmental impact for many years. Diets are prepared in reusable containers to limit the use of plastic bags. Food waste is picked up daily and composted producing energy and fertilizer. The nutrition center lab reuses shipping boxes. Many items are washed and donated to groups like A Gift for Teaching who reuse them for school projects. Bulk towels are used to reduce the need for paper towels. Wooden shipping pallets are stored and returned to vendors for reuse in future shipments. Existing recycling programs were utilized. A seven day measurement of trash and landfill/incineration diversion was conducted. All waste was weighed and the amount diverted from landfill or incineration was calculated to be greater than 90% over the seven day period.

In order to move towards certification, the Animal Nutrition Center worked closely with the Disney Environmental Integration Team and The Land pavilion at Epcot, who had just received Platinum level Zero Waste Certification, to learn best practices. All garbage and recycling containers from throughout the Animal Nutrition Center were removed and replaced with a centrally located recycling station. The Animal Nutrition Center team was trained to sort waste according to its waste stream. Items were sorted to be reused, recycled, or incinerated. An outside company was employed to find non-landfill and non-incineration options for some of the waste products. The Animal Nutrition Center worked with suppliers and vendors to find packaging options that resulted in fewer items going to landfill/incineration. Quarterly waste measurement continued with the waste diversion rate recorded at 95%, 98%, 95%, and 97%, after which time the application process for Zero Waste certification was started. The application consists of 15 categories with a possible 81 points. The 15 categories include redesign, reduce, reuse, compost, close the loop, recycle, reporting, diversion from landfill, zero waste purchasing, leadership, training, zero waste analysis, upstream management, hazardous waste prevention, and innovation. After submittal of the Animal Nutrition Center application and supporting documentation, the US Zero Waste Council conducted an on-site inspection. The level of Zero Waste certification is based on the score resulting from the application; bronze is 31-37 points, silver is from 38-45 points, gold from 46 to 63 points, and platinum from 64 to 81 points.

## **Results**

The Animal Nutrition Center scored 72 points on the application and was awarded Platinum level Zero Waste Certification.

## **Discussion**

The Animal Nutrition Center continues to work to limit the amount of waste going to landfill/incineration. A number of other teams within the Disney Animals, Science and Environment line of business have since been inspired to start their own Zero Waste programs, further helping to reduce the overall amount of items going to landfill/incineration from Disney's Animal Kingdom.

The Zero Waste Certification program may not be the best option for everyone as there are costs involved. Regardless, there are benefits to reducing the amount of waste going to landfill. Overall operation costs can be reduced and efficiencies found. Alternative disposal streams can be discovered which are beneficial to multiple parties. Some items can be collected and donated to organizations that use them for charitable benefit like aluminum can tabs for Ronald MacDonal House or hard plastic caps for Caps of Love which are sold and the money used to buy wheelchairs for children. Some areas recycle rubber-soled shoes which are recycled into soft surfaces for play grounds. The Animal Nutrition Center saves empty plastic strawberry and blueberry containers which are used for art projects by A Gift for Teaching. The Animal Nutrition Center worked with vendors to reduce disposable packaging and utilize reusable containers such as large plastic bins for rodent delivery or small cambros for mealworm delivery instead of disposable cardboard boxes. In addition to decreased packaging for disposal, time efficiencies were created as the mealworms arrive prepackaged in the desired amounts and rodents no longer need to be sorted into bins. Other vendors have changed packaging from black plastic wrap which is non-recyclable to clear plastic wrap that can be recycled. A feed manufacturer has not only started a pilot program to recycle poly woven pellet bags, they now have a sustainability department as well.

## **Conclusion**

The response from nutrition center cast, other Animal Kingdom teams, other partners, and vendors has been positive. Once people understood the reason for sorting waste and how to do it, compliance has been strong, resulting in a contamination rate of less than 0.03%. The interest and motivation has spread throughout the Animals, Science, and Environment line of business to other partners within Walt Disney World as well as to vendors that supply the Animal Nutrition Center helping to further reduce the environmental impact on our planet.

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