



buffalozoo

# Sustainability Plan 2016

## Introduction

Sustainability is defined as actions that meet the needs of the present without compromising the ability of future generations to meet their own needs. These needs can include environmental, economic and social needs. As zoos accredited by the Association of Zoos and Aquariums (AZA) strive to conserve animals and their ecosystems, they also strive to conserve natural resources utilized during business operations. According to the AZA, it is "...concerned about the species survival and ecosystem health and is therefore dedicated to making substantial positive impacts for their conservation. AZA-accredited zoos and aquariums serve as conservation centers that make significant contributions towards sustainable practices, field conservation, research, and informal educational programming, and provide society the opportunity to develop personal connections with the animals in their care."

## Our Sustainability Journey

The Buffalo Zoo, as a member of the AZA, aims to become a more environmentally and financially sustainable organization. This goal ultimately aids in accomplishing the mission of the Zoological Society of Buffalo, Inc.

### ***Zoological Society of Buffalo, Inc. Mission Statement:***

*The Buffalo Zoo promotes wildlife conservation through up-close animal encounters, engaging educational experiences, and participation in regional and international programs for endangered species.*

The Buffalo Zoo's current strategic plan to fulfill its mission identifies six (6) guiding principles for the implementation of the plan. One of the guiding principles calls for the Zoo to be good stewards of its animals, historical facilities and financial resources. To become good stewards the Zoo must work toward achieving strategic goal #3 of the plan to be a leader in animal care, welfare and conservation. One way to help achieve this goal is to actively work toward environmentally sustainable best practices and facilities serving as a model for our community.

### **Earth Smart Squad (ESS)**

To become more sustainable, the Earth Smart Squad (ESS) was voluntarily formed in 2012. This "green team" currently includes Buffalo Zoo staff representing almost every area of the Zoo as well as staff from Service Systems Associates (SSA), the company that runs retail visitor services for the Zoo. This group is charged with guiding the Zoo's sustainability efforts. The Earth Smart Squad's mission is *to be leaders in sustainability by inspiring the Buffalo Zoo to reduce its carbon footprint, while empowering the community to engage in green practices.*

The Earth Smart Squad functions under a shared leadership model as it is difficult for any one person to possess the ability, time, and skills required to lead the enormous charge of organization-wide sustainability while also maintaining a primary full-time position at the Zoo. The objective of shared leadership in this case is to lead one another based on individual strengths toward the achievement of the organization's sustainability goals. Different members of the group help guide a variety of sustainability goals (e.g power use reduction, waste management, etc.) while also maintaining specific Squad roles to keep group dynamics organized (scribe, facilitator, etc.). These roles may change from year to year. Members of the Earth Smart Squad and their current roles are as follows:

Kelly Brown – IT support  
Caitlyn Bruce - member at large  
Alicia DuBrava – scribe  
Penny Felski – meeting facilitation  
Rachel Gottlieb – communications  
Lynn Hougle – sustainability plan “nag”  
Dian Lewin – finance  
Jill Odachowski – staff-ESS liaison  
Tiffany Vanderwerf – group leader  
Casey Walborn - ESS - SSA liaison  
Nicole Wurstner - ESS - SSA liaison  
Jaymison Walter – member at large



The efforts of the Zoo and the Earth Smart Squad are currently guided by several sources including:

- **Sustainable Earth Solutions** – an organization that empowers people within organizations to act as sustainability leaders.
- **The Natural Step Framework** – a framework that converts sustainability theory and research into practice.
- **The AZA Green Guide “Building and Measuring Zoo & Aquarium Sustainability Plans”** – a document designed to help zoos and aquariums implement, achieve, and document a sustainability plan.
- **The Western New York Sustainable Business Roundtable (WNYSBR)**– a group that fosters collaborations that enable member businesses to act on their sustainability goals, maintain profitability, and promote a healthy community.

### Pledge

As part of the Zoo's commitment to sustainability and the WNYSBR, the Buffalo Zoo formally signed the WNYSBR pledge in 2015 stating,

“We commit to becoming a thriving and resilient business by establishing and implementing a Sustainability Plan that:

-reduces waste and pollution

-protects our waterways

-optimizes use of energy and materials

-invests in our communities in a transparent and measurable way that collectively, with the efforts of other WNY organizations, reduces the severity of global climate change.”

## Accomplishments

During the years of 2014-2015, the Buffalo Zoo accomplished the following:

Activity, Policy, or Program	Sustainability Element Addressed
Established a weekly cost for our produce order and re-established our relationship with Wegmans to donate produce.	Purchasing
Switched rodent vendors from 2 out of state areas to 1 local vendor. We were able to reduce packaging waste, shipping fuel and emissions.	Purchasing, Fuel Management, GHG Management
Began a partnership with local vendors featuring their items in the gift shop.	Purchasing
Established a new recycling procedure with Beastro management. Brainstormed different recycling areas w/ Beastro management including adjacent to the Beastro as well as inside the kitchen. Increased recycling amount by 2 large recycling bins per day in season (1 bin every other day in the off season). Decreased the amount going into the dumpster. Placed information on every item used in the Beastro to indicate if it could be recycled.	Waste Management
Increased the number of bottle/can recycling bins on grounds by 12 bins.	Waste Management
Increased the number of re-usable tote bags sold at the Beastro from ~ 100 to ~1500. Helped to decrease the plastic usage at the zoo. At the halloween event the zoo did not give out plastic bags but instead encouraged guests to purchase a reusable tote.	Waste Management
Upcycled bubble wrap from the gift shop for use to other vendors.	Waste Management
Used biodegradable utensils, plates and cups at Polar Bites in 2015 and at the Upstate New York Zoo Conference in 2015. The Conference used re-usable coffee mugs.	Waste Management
Electronic recycling event to help the community recycle unwanted electronic equipment. Hoping to partner with Sabres Green team for a paper shredding event in March 2016.	Waste Management
Employees at all employee meetings bring their own cups for coffee to reduce waste and promote reusability.	Waste Management
Re-use scrap paper for printing when suitable.	Waste Management
Went from paper to electronic order form and invoice for frozen prey order. Provide employee paychecks electronically.	Waste Management

Determined 2013 and 2014 baseline energy figures for electricity, natural gas and fuel for the whole zoo.	Energy Management
Shut off lights when leaving many areas in the Zoo.	Energy Management
Gave presentations to all the staff on energy usage and brainstormed how individual areas could help reduce usage.	Awareness and Energy Management
Put out quarterly newsletters to all the staff and give updates at our all employee meetings. Present the “green-handed” award for employees that are doing “green” things throughout their workday and areas.	Awareness
Hosted a table during a zoo green event to inform public of what we do.	Awareness
Added informative signs at the gift shop to help the guests learn about the eco products we carry.	Awareness
Created the plastic bag Polar Bear with leftover plastic bags, to be exhibited at Arctic Edge with signage associating the reuse of plastic bags and conservation and extinction.	Awareness
Opened the Arctic Conservation Interpretive Center for the public.	Awareness
Hellbender “conservation cart” was established and is being used regularly for interpretation.	Awareness
Fixed leaking hoses in the Reptile House.	Water Management
Joined the Western New York Sustainable Business Roundtable (WNYSBR).	

## Sustainability Goals

The following includes the goals and details identified by the Earth Smart Squad and the Zoo’s PBI Arctic Ambassador Center committee. Goals were approved by the Buffalo Zoo’s President/CEO for inclusion in the Buffalo Zoo’s 2016 Sustainability Plan:



### **WATER MANAGEMENT**

**Goal:** Internally assess water usage in at least two (2) exhibits.

**Champion:** Jill

**Team:** Lynn, Caitlyn, and Penny

**Practice Strategy 1:** Seek guidance from the NYS Pollution Prevention Institute (NYSP2I) on methods to internally assess our water usage.

**Practice Strategy 2:** Practice methods learned from NYSP2I to assess water usage in a small, simple exhibit

**Practice Strategy 3:** Track water usage in the Reptile House prior to renovations to establish a baseline to determine if renovations help to decrease water usage.



## WASTE MANAGEMENT

**Goal:** *Reduce the number of disposable water bottles and cups used at the Zoo.*

**Champion:** Dian  
**Team:** Rachel, Casey, Penny

**Practice Strategy 1:** Fix the water bottle filling station and create signage at the station highlighting its use and benefits.

**Practice Strategy 2:** Explore feasibility of purchasing and installing a second water bottle filling station near the front entrance. If the required plumbing and finances are feasible, purchase and install new station. (approx. \$900)

**Practice Strategy 2:** Determine the ROI of selling re-usable cups for water. If feasible, begin selling cups.

**Goal:** *Reduce the amount of waste destined for the landfill.*

**Champion:** Tiffany  
**Team:** Tiffany, Jill, Vicki, Casey

**Practice Strategy 1:** Plan logistics of and pilot test composting limited organic surplus (approximately 10 yards of herbivore feces).

**Practice Strategy 2:** Provide Zoo map recycle bins near exits as a way to collect/recycle maps. Re-use the gently used maps.

**Practice Strategy 3:** Explore safe avenues to dispose of water quality chemicals.

**Practice Strategy 4:** Acquire a sponsor for Wines in the Wild 2016 to help defray the cost of using recycled paper products as we did for Polar Bites 2015.

**Practice Strategy 5:** Increase sales of Eco Tote Bags by 10% over 2015 sales.

**Practice Strategy 6:** Obtain recycling bins for GSO/SSA staff shared break room for better recycling habits.

**Practice Strategy 7:** Reduce receipt tape usage at Zootique by using new credit card devices for POS systems. Signature is done on a touch screen, with only one receipt print out per customer.



## ENERGY MANAGEMENT

*Goal: Reduce the use of “brown” energy.*

**Champion:** Tiffany

**Team:** Alicia

**Practice Strategy 1:** Engage with Syracuse University Industrial Assessment Group to obtain a full energy assessment of the Zoo campus. Commit to seriously exploring at least two of the recommendations from the assessment in 2016.

**Practice Strategy 2:** Explore feasibility of the purchase and installation of a small solar array to provide energy to run the automatic arm for the parking lot gate.

## AWARENESS

*Goal: Increase public and staff awareness of environmental sustainability to encourage their participation in environmentally sustainable actions.*

**Champion:** Rachel

**Team:** Lynn, Jill, Tiffany



**Practice Strategy 1:** Hold keeper staff workshops to help them understand how to include green practices in our keeper talks and presentations.

**Practice Strategy 2:** Provide at least 12 conservation tips (1 tip/month) on the Zoo’s website.

**Practice Strategy 3:** Continue providing quarterly updates via a newsletter.

**Practice Strategy 4:** Provide green messaging in at least half of our Zooper Saturday events. This may come in the form of signage, keeper talks, and/or activities.

**Practice Strategy 5:** Create more product knowledge signs for all eco-based products in Zootique.

**Practice Strategy 6:** Promote the use of the Zoo’s charging stations for electric cars.



*Goal: Participate in Polar Bears International’s yearly campaigns/events to maintain our status as one of their Arctic Ambassador Centers.*

**Champion:** Tiffany

**Team:** Rachel, Caitlyn, Vicki, Megan, Adair, Donna F., Todd

It should be noted that more detailed plans for participation can be found in an e-mail to the team for this goal from Tiffany dated 11/16/15.

**Practice Strategy 1:** International Polar Bear Day (2/27/16) – Turn down thermostat in public and very specific animal areas without jeopardizing the health of animals. Get the word out to the public, patrons, staff, and schools.

**Practice Strategy 2:** Earth Hour (3/19/16 @ 8:30 PM) – Zoo will internally celebrate at 3:00 PM on 3/18/16 by turning off lights. Get the word out to public and schools to participate.

**Practice Strategy 3:** Earth Day (4/22/16) – Get the word out through media. Staff will be rewarded for carpooling. Patrons will receive discounted admission for using “green” transportation (e.g. carpool, bike, walk, mass transit, etc.) to come to the Zoo.

**Practice Strategy 4:** Arctic Sea Ice Day (7/15/16) – Get the word out through media. Hold a farmer’s market at the Zoo on July 17th. Patrons who bring reusable bags to bag up their purchases will receive discounted admission. Staff will have a potluck of foods made from local ingredients/sustainably produced ingredients.

**Practice Strategy 5:** Polar Bear Week (first week in November, 2016) – Get the word out through media. Provide Paw of Approval Award to a business within the WNYSBR. Zooper Saturday will focus on polar bears. Staff will try for zero waste lunches during the week.

## **INTERNAL PARTICIPATION**

***Goal: Encourage all departments to continually look for ways to make the Zoo more environmentally sustainable.***

**Champion:** ESS

**Team:** ESS

**Practice Strategy 1:** Meet with areas and departments to see what was accomplished in 2015 after the energy conservation meetings and what they feel can be done in 2016 in their areas.

- Lynn and Jill - Education, Administration, and Grounds/Maintenance/Engineers
- Penny and Alicia - Beastro, Guest Services
- Tiffany and Rachel - Animal Department
- Dian - Ruben and County Crew



