2018
Annual Report on Conservation and Science
INTRODUCTION

2018 Annual Report on Conservation and Science

The Association of Zoos and Aquariums and its member facilities envision a world where, as a result of their work, all people respect, value, and conserve wildlife and wild places.

The 2018 Annual Report on Conservation and Science (ARCS) celebrates the conservation efforts, education programs, green (sustainable) business practices, and research projects of AZA-accredited zoos and aquariums and certified related facilities.

Content in ARCS reflects submissions made to annual surveys available through AZA’s website. Each survey topic has been carefully defined to maximize consistency of reporting throughout the AZA community. AZA’s Wildlife Conservation Committee and Research and Technology Committee review all of the relevant submissions by members to promote even greater consistency.

Field conservation focuses on efforts having a direct impact on animals and habitats in the wild. Education programming includes those with specific goals and delivery methods, defined content, and a clear primary discipline and target audience. Mission-focused research projects involve application of the scientific method, are hypothesis (or question)-driven, involve systematic data collection, and analysis of those data and draw conclusions from the research process. Green business practices focus on the annual documentation and usage of key resources: energy, fuel for transportation, waste, and water – as well as identification of specific green practices being implemented.

AZA is grateful to each member that responded to these surveys. The response rate for each 2018 survey was as follows:

» field conservation – 92%
» education programming – 59%
» green business practices – 65%
» mission-focused research – 65%

While the 2018 ARCS focuses on individual activities undertaken that year, download the 2018 Highlights (available at: aza.org/annual-report-on-conservation-and-science) to learn more about what the AZA community accomplished together.

This report was compiled by Jordyn Chace (Program Assistant, Conservation and Science), Cyrena Tate (Intern, Conservation, Management and Welfare Sciences), and Shelly Grow (Vice President, Conservation and Science).
Argentina

FUNDACIÓN TEMAIKÉN

Education

Ambassador Animals
Conservation of Biodiversity Through Ecotourism in Osununu Natural Reserve Project
Content Development and Processing
Educational Internship Program
Educational Visits
Educational Visits for People With Disabilities
Environmental Education Program ConCiencia Activa
Environmental Multipliers Educational Program – “Multiplicadores Ambientales”
Festival “We Are Diversity”
Internship Program at the Veterinarian Hospital
Keepers Talks to Visitors
Long-Distance Education Course: Environmental Education in Rural Settings
Micro Website of the Education Department: “Comunidad Activa”
Nature Play Program in the Biopark
Professional Skills Practicum in Tourism Technical Course
Project of Articulation Between Fundación Temaikén and Instituto Superior de Formación Docente y Técnica N° 55 in Escobar
University Courses Taught: Agreement With Universidad de Belgrano
Volunteer Programs

Field Conservation

Conservation of Osununu Natural Reserve Project
Flora and Ecosystems Inventory
Research Project in Magellanic Penguin (Spheniscus magellanicus)

Green Practices

ENERGY
Documented Amount Spent
Documented Amount Used

FUEL
Documented Amount Spent
Documented Amount Used

GREEN PRACTICES IMPLEMENTED

Alternative Transportation Benefits for Staff
Community-Based Sustainability Projects
Completed Greenhouse Gas Inventory
Composting (On-Site or Off-Site)
Diverted or Recycled Construction Waste
Green Purchasing Policy/Green Procurement
Procured Local Food for On-Site Animals and/or Guest

PLANS, POLICIES, AND BUDGETS

Developed or Updated a Sustainability Plan (or Equivalent)
Developed or Updated a Sustainability Plan

WASTE
Documented Amount Recycled

Research

Habitat Use of Broadnose Sevengill Sharks (Notorynchus cepedianus) in the Argentine Sea
Resolution of Complex Cognitive Tasks and Use of Tools in Plush-Crested Jays (Cyanocorax chrysops) (Corvidae)
Study and Conservation of Bat Diversity in el Área Importante para la Conservación (AICOM) Osununú – Teyú Cuaré
Bahamas

ATLANTIS, PARADISE ISLAND

Education
Atlantis Stingray Experience
Discovery Tour
Dolphin Deep Water Swim
Dolphin Shallow Water Swim
Jr. Ultimate Trainer for a Day
On-Grounds School Behind-the-Scenes Programs
Rise and Shine
School Aquarium Outreach Program
Sea Lion Interaction
Sea Squirts
Serenity Snorkel
Snorkel the Ruins of Atlantis
Sunrise Fitness
Ultimate Trainer for Day

Field Conservation
Bahamas Marine Mammal Research Organization (BMMRO) – Stranding Response to Support Marine Mammals in the Bahamas and Marine Mammal Research
Bahamian Coral Reefs: Taking Action to Protect Reefs Through Education and Action
Manatee Health Assessment
Providing the Scientific Basis for a Marine Protected Area Designation and Reef Rehabilitation in the Bahamas
Tour de Turtles

Green Practices
ENERGY
Documented Amount Spent
Documented Amount Used

FOOD
Sourced Local Food or Grew it On-Site

FUEL
Documented Amount Spent
Documented Amount Used

GREEN PRACTICES IMPLEMENTED
Composting (On-Site or Off-Site)
Diverted or Recycled Construction Waste
Graywater Reuse and/or Rainwater Harvesting
Green Purchasing Policy/Green Procurement

PLANS, POLICIES, AND BUDGETS
Developed or Updated a Sustainability Plan (or Equivalent)
Developed or Updated a Sustainability Plan

WATER
Documented Amount Spent
Documented Amount Used

Bermuda

BERMUDA AQUARIUM, MUSEUM AND ZOO

Field Conservation
Bermuda Amphibian Project
Bermuda Aquarium, Museum, and Zoo (BAMZ) – Internship Programme
Bermuda Aquarium, Museum, and Zoo (BAMZ)/Bermuda Zoological Society (BZS) – Research Grants and Support
Bermuda Marine Moorings Initiative
Bermuda Turtle Project
Characterising Bermuda’s Baitfish Populations to Improve Management and Fishery Sustainability
Marine Invasive Species in Bermuda
Marine Wildlife Rescue and Rehabilitation
Sargassum Community Studies

Bahamas

ATLANTIS, PARADISE ISLAND

Education
Atlantis Stingray Experience
Discovery Tour
Dolphin Deep Water Swim
Dolphin Shallow Water Swim
Jr. Ultimate Trainer for a Day
On-Grounds School Behind-the-Scenes Programs
Rise and Shine
School Aquarium Outreach Program
Sea Lion Interaction
Sea Squirts
Serenity Snorkel
Snorkel the Ruins of Atlantis
Sunrise Fitness
Ultimate Trainer for Day

Field Conservation
Bahamas Marine Mammal Research Organization (BMMRO) – Stranding Response to Support Marine Mammals in the Bahamas and Marine Mammal Research
Bahamian Coral Reefs: Taking Action to Protect Reefs Through Education and Action
Manatee Health Assessment
Providing the Scientific Basis for a Marine Protected Area Designation and Reef Rehabilitation in the Bahamas
Tour de Turtles

Green Practices
ENERGY
Documented Amount Spent
Documented Amount Used

FOOD
Sourced Local Food or Grew it On-Site

FUEL
Documented Amount Spent
Documented Amount Used

GREEN PRACTICES IMPLEMENTED
Composting (On-Site or Off-Site)
Diverted or Recycled Construction Waste
Graywater Reuse and/or Rainwater Harvesting
Green Purchasing Policy/Green Procurement

PLANS, POLICIES, AND BUDGETS
Developed or Updated a Sustainability Plan (or Equivalent)
Developed or Updated a Sustainability Plan

WATER
Documented Amount Spent
Documented Amount Used

Bermuda

BERMUDA AQUARIUM, MUSEUM AND ZOO

Field Conservation
Bermuda Amphibian Project
Bermuda Aquarium, Museum, and Zoo (BAMZ) – Internship Programme
Bermuda Aquarium, Museum, and Zoo (BAMZ)/Bermuda Zoological Society (BZS) – Research Grants and Support
Bermuda Marine Moorings Initiative
Bermuda Turtle Project
Characterising Bermuda’s Baitfish Populations to Improve Management and Fishery Sustainability
Marine Invasive Species in Bermuda
Marine Wildlife Rescue and Rehabilitation
Sargassum Community Studies
Canada

Alberta

CALGARY ZOO

Field Conservation
- Black-Tailed Prairie Dog and Black-Footed Ferret Conservation Research
- Burrowing Owl Headstarting
- Community-Based Conservation of Lemurs in Madagascar
- Community-Based Conservation of Mountain Bongo in Kenya
- Community-Based Conservation of Western Sitatunga and Hippos in Ghana
- Fisher Wild-to-Wild Translocations
- Greater Sage Grouse: Reintroduction Breeding and Research
- IUCN/SSC Reintroduction Specialist - Group Training for Effective Conservation Translocations
- Northern Leopard Frog Reintroduction Breeding and Research in Western Canada
- Swift Fox Recovery
- Vancouver Island Marmot Reintroduction Breeding
- Whooping Crane Reintroduction Breeding and Research

Green Practices

ENERGY
- Documented Amount Spent
- Documented Amount Used
- Generated Renewable Energy On-Site

EXTERNAL SUPPORT
- Received Support From External Sources for Green Projects

FOOD
- Sourced Local Food or Grew it On-Site

FUEL
- Documented Amount Spent
- Documented Amount Used

GREEN CERTIFICATIONS
- Certified as a Wildlife Habitat
- Certified by the Green Restaurant Association

GREEN PRACTICES IMPLEMENTED
- Alternative Fuel Usage for On-Site Fleet
- Alternative Transportation Discounts for Guests
- Building Energy Management
- Commingled Recycling
- Community-Based Sustainability Projects
- Completed Greenhouse Gas Inventory
- Composting (On-Site or Off-Site)
- Denitrification Systems On Ground
- Diverted or Recycled Construction Waste
- Energy Submetering
- Generated Solar or Wind Energy
- Graywater Reuse and/or Rainwater Harvesting
- Green Purchasing Policy/Green Procurement
- Procured Local Food for On-Site Animals and/or Guest
- Purchased Green Power or Renewable Energy Credits (RECs)
- Smart Building Strategies
- Stormwater Management Program
- Wastewater Reduction
- Water Submetering
- Waterwise Landscaping

PLANS, POLICIES, AND BUDGETS
- Dedicated a Line Item in the Budget for Green Practices
- Developed or Updated a Sustainability Plan (or Equivalent)
- Developed or Updated a Sustainability Plan

WASTE
- Documented Amount Composted
- Documented Amount Recycled
- Documented Amount Sent to Landfill

WATER
- Documented Amount of Wastewater Generated
- Documented Amount Spent
- Documented Amount Used

Research
- Evaluating Community Conservation Success
- Fisher Wild-to-Wild Translocations
- Vancouver Island Marmot Anti-Predator Behaviour Research
British Columbia

VANCOUVER AQUARIUM MARINE SCIENCE CENTRE

Field Conservation
A DNA-Based Monitoring Approach for Nearshore Benthic Habitats
Agarum Monitoring
Annapolis Biodiversity Index Survey
Assessing Glass Sponge Reef Dynamics and Habitat Complexity Using 3D Structure From Motion
Assessing Hormone Concentrations in Killer Whale Fecal Samples
Assessing the Nutritional Status of Killer Whales Using Unmanned Aerial Platforms
Biodiversity Monitoring
British Columbia Cetacean Sightings Network
British Columbia Northern Leopard Frog Recovery Project
Cetacean Conservation Genetics
Churchill Beluga Research Project
Field Study of Demography, Population Status, and Natural History of British Columbian and Alaskan Killer Whales
Frog Conservation and Disease
Fur Seal and Sea Lion Projects
Health and Disease of Killer Whales
Humpback Whale Health Assessment Based on Photogrammetry and Blow Samples
Kelp Bed and Rocky Reef Monitoring
Marine Conservation Assessment Map
Marine Mammal Rescue Centre
Monitor Glass Sponge Reefs
Monitor Lingcod Spawn Demography
North Coast Cetacean Research Project
Oregon Spotted Frog Recovery Project
Panamanian Golden Frogs
Pond Inlet Narwhal Project
Recovery of Rockfish in Rockfish Conservation Areas
Rockfish Habitat Use and Connectivity
Rockfish Winter Hiding
Sculpting Rockfish Habitat in Howe Sound

Sea Otter Nutrition
St. Lawrence Beluga Research Project
Walrus Energetics and Physiology

Green Practices

ENERGY
Documented Amount Spent
Documented Amount Used
Purchased Renewable Energy

EXTERNAL SUPPORT
Received Support From External Sources for Green Projects

FOOD
Sourced Local Food or Grew it On-Site

FUEL
Documented Amount Spent
Documented Amount Used

GREEN CERTIFICATIONS
Certified Under ISO 14001
One or More Buildings LEED-Certified by the US Green Building Council

GREEN PRACTICES IMPLEMENTED
Building Energy Management
Commingled Recycling
Community Supported Agriculture (CSA) Program for Staff
Completed Greenhouse Gas Inventory
Composting (On-Site or Off-Site)
Diverted or Recycled Construction Waste
Graywater Reuse and/or Rainwater Harvesting
Green Building Policy/Commitment
Green Purchasing Policy/Green Procurement
Procured Local Food for On-Site Animals and/or Guest
Smart Building Strategies
Used Environmental Management System
Wastewater Reduction
Waterwise Landscaping
GREENHOUSE GAS EMISSIONS
Documented Amount of Greenhouse Gas Emissions

PLANS, POLICIES, AND BUDGETS
Dedicated a Line Item in the Budget for Green Practices
Developed or Updated a Sustainability Plan (or Equivalent)
Developed or Updated a Sustainability Plan

WASTE
Documented Amount Composted
Documented Amount Recycled
Documented Amount Sent to Landfill

WATER
Documented Amount Spent
Documented Amount Used

Research
Cetacean Novel Clinical Techniques
Contaminant Related Health Risks in Southern Resident Killer Whales
Fish Disease Case Reports
Frog Conservation and Disease
Harbour Seal Post-Release Monitoring
Health of the Western Arctic Beluga Whales as it Relates to Contaminants and Climate Change
Marine Mammal Health and Physiology
Microplastics in the Ocean
Pinniped Anesthesia
PollutionTracker – Contaminant Monitoring the British Columbia Coastal Environment
Sea Lion Darting and Disentanglement Project

Manitoba

ASSINIBOINE PARK ZOO
Field Conservation
Bird Strike Mitigation
Chimney Swift Chimney Installation
Grassland Skipper Conservation and Headstarting Program
International Polar Bear Day
Manitoba Burrowing Owl Recovery Program
MonarchHealth – *Ophryocystis elektroscirrha* (OE) Testing
Red Panda Network (RPN)
Snow Leopard Trust (SLT) – Fundraising

Green Practices

ENERGY
Documented Amount Spent
Documented Amount Used
Generated Renewable Energy On-Site

FOOD
Sourced Local Food or Grew it On-Site

FUEL
Documented Amount Spent

GREEN PRACTICES IMPLEMENTED
Building Energy Management
Commingled Recycling
Community Solar Program
Completed Greenhouse Gas Inventory
Composting (On-Site or Off-Site)
Diverted or Recycled Construction Waste
Energy Submetering
Generated Solar or Wind Energy
Green Building Policy/Commitment
Green Purchasing Policy/Green Procurement
Procured Local Food for On-Site Animals and/or Guest
Purchased Carbon Offset(s) for On-Site Utility Use
Water Submetering
Ontario

RIPLEY’S AQUARIUM OF CANADA

Education

Aquarist for a Day
Aquatic Adventurers
Behind the Scenes Tours
Discovery Dive
Dive Show-Rainbow Reef
Dive Show-Ray Bay
Kelp Kart
Ocean Explorers Club
School Program: Amazing Algae and Other Aquatic Plants (Grade 3)
School Program: Aquarium Careers (Grade 11/12)
School Program: Creatures Undercover (Grade 2)
School Program: Deep Sea Diver (Grade 5)
School Program: Lake Invaders (Grade 6)
School Program: My Own Aquarium (Grade 1)
School Program: Pollution Solution (Grade 5 & 7)
School Program: Sensational Sharks (Kindergarten)
School Program: Squid Dissection (Grade 10) – Formerly Climate in Crisis
School Program: Stream Science (Grade 9)
School Program: Watery Web (Grade 4)
School Program: What’s in the Water (Grade 8)
Sea Squirts
Sleepover (Sleep With the Sharks)
Stingray Experience
Summer and March Break Camps
Tank Talk

Field Conservation

Great Canadian Shoreline Clean Up

Green Practices

GREEN PRACTICES IMPLEMENTED

Alternative Transportation Benefits for Staff
Commingled Recycling
Community-Based Sustainability Projects
Composting (On-Site or Off-Site)
Graywater Reuse and/or Rainwater Harvesting

Research
Invasive Lionfish Eradication Research

TORONTO ZOO
Education
Animal Behaviour
Animal Observation Research – Biodiversity and Adaptive Strategies
Animal Observation Research – Methods Comparison
Animal Observations Research – Student Lab on Primate Behaviour
Avian Endoscopy Training for Clinical Veterinarians (Pedagogical Study)
Specimen Request – Native Ontario Turtle Species
Venomous Staff Training (Pedagogical)
Venomous Training: Canadian Armed Forces & Toronto Animal Services (Pedagogical)

Field Conservation
Amphibian Rescue Centre (ARC) – Husbandry and Reintroduction Program for the Oregon Spotted Frog
Amphibian Rescue Centre (ARC) – Husbandry and Reintroduction Program for the Wyoming Toad
Aqua – Links
Atlantic Salmon Reintroduction Program
AZA FrogWatch USA
Black-Footed Ferret Conservation Recovery Program
Blanding’s Turtle Headstart Project
Eastern Loggerhead Shrike Captive Breeding Program
Eastern Milksnake Monitoring
First Nations Way of Knowing
Freshwater Mussels Field Program
Great Lakes Program
Great Lakes: Redside Dace – Conservation and Community Involvement
Habitat Use and Nesting Patterns of Turtles in Rouge Park
Management, Outreach, Husbandry, and Reintroduction Program for the Puerto Rican Crested Toad

Mudpuppy Conservation and Citizen Science: A Partnership Project Among Zoos and Aquariums in the Great Lakes Basin
Ontario Turtle Tally
Turtle Island Conservation
Vancouver Island Marmot Conservation Recovery Program
Wildlife Health Centre Husbandry and Reintroduction Program for the Mississippi Gopher Frog
Wood Turtle Headstarting
Working Together to Save the Eastern Massasauga Rattlesnake

Green Practices
ENERGY
Documented Amount Spent
Documented Amount Used
Generated Renewable Energy On-Site
Purchased Renewable Energy

EXTERNAL SUPPORT
Received Support From External Sources for Green Projects

FOOD
Sourced Local Food or Grew it On-Site

FUEL
Documented Amount Spent
Documented Amount Used

GREEN PRACTICES IMPLEMENTED
Building Energy Management
Commingled Recycling
Community Supported Agriculture (CSA) Program for Staff Community-Based Sustainability Projects
Composting (On-Site or Off-Site)
Diverted or Recycled Construction Waste Energy Submetering
Generated Solar or Wind Energy
Graywater Reuse and/or Rainwater Harvesting
Green Building Policy/Commitment
Green IT
Green Purchasing Policy/Green Procurement
Procured Local Food for On-Site Animals and/or Guest
Purchased Green Power or Renewable Energy Credits (RECs)
Smart Building Strategies
Used Enterprise (IT) Solutions to Track and Measure Sustainability Performance
Used Environmental Management System
Water Submetering
Waterwise Landscaping

GREENHOUSE GAS EMISSIONS
Documented Amount of Greenhouse Gas Emissions

PLANS, POLICIES, AND BUDGETS
Dedicated a Line Item in the Budget for Green Practices
Developed or Updated a Sustainability Plan (or Equivalent)
Developed or Updated a Sustainability Plan

WASTE
Documented Amount Composted
Documented Amount Recycled
Documented Amount Sent to Landfill

WATER
Documented Amount Spent
Documented Amount Used

Research
Animal Observation Research – Remote Detection of Breathing Patterns as an Indication to Intention for Vocal Production
Animal Observation Research – The Effects of Extra Forage/Browse on the Incidence of Stereotypic Tongue-Rolling in Giraffes
Animal Observations Research – Behaviour of African Penguins in Captive Environments
Animal Observations Research – Effects of Carcass Feeding on Tiger Behaviour
Animal Observations Research – Mapping the Enclosure Use, Behaviours, and Interactions of Captive Western Lowland Gorillas in Reference to Visitor Size Wing Geographic Information Systems (GIS)

Animal Observations Research – Thermoregulatory Behaviour in Komodo Dragon
Aspects of Inhalation Anesthesia and the Use of Midazolam in the Ball Python
Assessing the Nutritional Status of Free-Ranging and Human Managed Populations of Black-Footed Ferrets
Assessing the Potential for Visual and Behavioural Cues of Reproductive Ability in Golden Lion Tamarins
Assessment of Physiological Parameters During Anesthesia in Przewalski’s Horses (Equus przewalskii)
Assisted Reproductive Technologies as a Method of Embryo Production in Wood Bison
Developing Assisted Reproductive Techniques for the Vancouver Island Marmot
Do Orangutans Choose to Choose?
Exploring the Impacts of Diet Change on Gut Microbial Communities in the Relocation Context of Captive-Born Animals
Gut Microbial Communities of the Vancouver Island Marmot in Captivity and in the Wild
Infrared Thermography as a Non-invasive Tool to Quantify Acute Stress Responsiveness in Birds
Physiological Correlates of Fitness in Wild and Captive-Reared Eastern Loggerhead Shrikes
Specimen Request – all Mammalian Species
Specimen Request – All Primates
Specimen Request – Arctic Wolf feces
Specimen Request – Bactrian Camel
Specimen Request – Cervids
Specimen Request – Elephant
Specimen Request – Elk, Large North American Mammals
Specimen Request – Flamingo
Specimen Request – Grizzly Bear
Specimen Request – Hyena
Specimen Request – Kangaroo
Specimen Request – Loggerhead Shrikes
Specimen Request – Mudpuppy, Giant Salamander, and Lungfish
Specimen Request – Nile Monitor (Varanus niloticus), Black Tree Monitor (Varanus beccarii), and Komodo Dragon (Varanus komodoensis)
Specimen Request – Orangutans
Specimen Request – Spotted Hyena
Specimen Request – Tumour Tissue
Specimen request – Various
Specimen Request – White Rhino
Studies on the Behaviour and Physiology of Polar Bears Under Human Care
The Suitability of Willow Trees as Animal Forage and Their Application in Zoological Institutions
Validation of the Body Condition Assessment of Polar Bears With a High Body Condition Score

Quebec

ZOO DE GRANBY

Field Conservation
Assessing the Occurrence of Northern and Southern Flying Squirrels in the Montérégie and Estrie Regions of Canada
AZA Conservation Grants Fund (CGF)
Bats Recovery Plan in Quebec
Belize Jaguar Project
Conservation and Enhancement of Habitats and Endangered Species in Boises Miner, Granby, Quebec, Canada
Conservation of Red Pandas
Fauna and Flora Characterisation and Enhancement at Saint-Quentin Island, Trois-Rivières
International Elephant Foundation (IEF) – African Elephant Conservation
International Rhino Foundation
Protection of Biodiversity, Anti-Poaching, and Conservation of Gorillas and Elephants in Campo-Ma’an National Park in Cameroon
Protection of the Chimney Swift’s Nesting Habitats and Study of Migration Patterns
Sharks Conservation in the St. Laurence River and in the North of Quebec
Snow Leopard Trust (SLT) – Snow Leopard Conservation in Asia
Spiny Softshelled Turtle Recovery in Québec
Union québécoise de réhabilitation des oiseaux de proie
Wild CATS – (ALTA) – Amur Leopard Conservation in Russia

Green Practices

GREEN PRACTICES IMPLEMENTED
Building Energy Management

PLANS, POLICIES, AND BUDGETS
Dedicated a Line Item in the Budget for Green Practices
Developed or Updated a Sustainability Plan (or Equivalent)
Developed or Updated a Sustainability Plan
Specified a Portion of the Amount Saved for Next Year’s Green Practices

Research

Alopecia in Japanese Macaques
Behavioural Impact of Human Presence on Mammal Mesopredators in Protected Areas of Québec
Comparative Health Assessment of Atlantic Wolffish (Anarhichas lupus) in the Wild and in Captivity
Determination of the Pharmacokinetics of a Single Oral Dose of Trazodone and its Effect on the Activity Level
Feasibility and Cost-Effectiveness Analysis of Reintroduction Programs for Mammalian Species at Zoo de Granby
Monitoring Beluga Whales in the Mackenzie Delta, NWT, to Learn More About the Beaufort Sea Beluga Whale Population
Pharmacokinetics Study of Selamectin Administered to Rainbow Lorikeets (Trichoglossus haematodus) infected by Nematodes
Presence and Impact of Noise in the Zoo Environment on Behavior and Welfare
Using DNA Metabarcoding to Identify Endangered Animals Used in Steeped Alcohol
Hong Kong

OCEAN PARK CORPORATION

Education

Animal Encounter Programme
Animal Feeding Programme
Animal Keeper Programmes
Big Feet Small Feet Union
Chinese White Dolphin Boat Trip
Corporate Training Programme
Don’t Feed Wild Animal Programme
ECF Ecology and Conservation 101: Grooming the Next Great Ecologist
Grand Aquarium Scuba Diving/Exploration
Habitat Walk & Talk
Juvenile Horseshoe Crab Rearing Programme
Nighttime in the Ocean’s Depths
No Straw Campaign
Plankton Education Programmes (Kindergarten)
Seasonal Camps
The 23rd Ocean Park Conservation Day
University Student Sponsorship Programme
Young Explorers Club Programme (Regular Programme)
Young Explorers Club Programme (Weekend Discovery Fun Day)

Field Conservation

Activity Pattern and Habitat Utilisation of Yangtze Finless Porpoise in Zhenjiang Nature Reserve, Hubei
Amphibian Conservation on the Roof of Indochina
An Assessment of Gene Flow, Genetic Connectivity, and Evolution Throughout Southeast Asia and the Coral Triangle to Promote Informed Marine Conservation Planning and Management
Assessment of Characteristics and Distribution of Human-Induced Underwater Noise in Chinese White Dolphin Habitats, Pearl River Estuary
Building Capacity to Ensure Sustainable Management Frameworks and Practices that Conserve the Critically Endangered Bengal Florican, the Endangered Black-Faced Spoonbill, Greater Adjutant, and More
Catalysing Community-Led Marine Conservation in Sulawesi

Colombia

ZOOLÓGICO DE CALI

Field Conservation

Amphibian Conservation Strategy in Colombia

Green Practices

ENERGY
Documented Amount Spent
Documented Amount Used
Generated Renewable Energy On-Site

FOOD
Sourced Local Food or Grew it On-Site

FUEL
Documented Amount Spent
Documented Amount Used

GREEN PRACTICES IMPLEMENTED
Composting (On-Site or Off-Site)
Generated Solar or Wind Energy

PLANS, POLICIES, AND BUDGETS
Dedicated a Line Item in the Budget for Green Practices

WASTE
Documented Amount Composted
Documented Amount Recycled
Documented Amount Sent to Landfill

WATER
Documented Amount of Wastewater Generated
Documented Amount Spent
Documented Amount Used
Initiation Work for Conservation of Yellow-Breasted Bunting (*Emberiza aureola*)

Investigation of Big-Head Schizothoracin Resources and Habitat in Xinjiang Tarim River

Local Community Collaboration for the Successful Conservation of the Bali Starling

Monitoring and Welfare Assessment of Captive Yangtze Finless Porpoise Pregnancy and Postnatal Care

Population Distribution and Feeding Ecology of Finless Porpoise in Liaodong Bay and Northern Yellow Sea

Population, Habitats, and Conservation of the Critical Endangered Vietnamese Giant Land Snail (*Bertia cambojiensis*): Research and Local Capacity Building

Prediction on Population Abundance, Spatio-Temporal Distribution, and Optimal Habitat of Yangtze Finless Porpoise in Nanjing

Research and Action to Advance Conservation of Taimen

Research on Leishan Spiny Toad Habitat Selection for Reproduction

Research on Mechanical Effects of Large-Scale Reclamation Projects on Habitat Use of Chinese White Dolphin

Right from the Start: Guiding the Philippines as it Works Towards Implementing CITES for Vulnerable Seahorses

Risk Assessment and Countermeasures on Fish Bait Disease of Yangtze Finless Porpoise in Swan Island Cetacea Protected Area, Hunan

Safeguarding Endangered Turtle Populations in Hong Kong


Standardisation of Patrol and Monitoring in Nature Reserves in Gansu

Study on Sustainable Grazing and Management Policy of Giant Panda’s Habitat

Summarizing Experience and Promotion of Yangtze Finless Porpoise Wild Population Recovery in Dongting Lake

Systematic Surveys for Annamite Endemic Mammals in Pu Mat National Park

Understanding Impacts of Climate Change on At-Sea Populations of Green Sea Turtles (*Chelonia mydas*) in Malaysia and the Philippines

Wildlife Monitoring Project in Taibai Niuweihe Provincial Nature Reserve, Shaanxi
Green Practices

ENERGY
Documented Amount Spent
Documented Amount Used
Generated Renewable Energy On-Site

FUEL
Documented Amount Spent
Documented Amount Used

GREEN PRACTICES IMPLEMENTED
Alternative Fuel Usage for On-Site Fleet
Commingled Recycling
Completed Greenhouse Gas Inventory
Energy Submetering
Green Purchasing Policy/Green Procurement
Procured Local Food for On-Site Animals and/or Guest
Wastewater Reduction
Water Submetering

GREENHOUSE GAS EMISSIONS
Documented Amount of Greenhouse Gas Emissions

PLANS, POLICIES, AND BUDGETS
Developed or Updated a Sustainability Plan (or Equivalent)
Developed or Updated a Sustainability Plan

WASTE
Documented Amount Recycled
Documented Amount Sent to Landfill

WATER
Documented Amount Spent
Documented Amount Used

Research

Altruistic Food Sharing in Indo-Pacific Bottlenose Dolphins (Tursiops aduncus)

Biosonar Research

Development of Pregnancy Diagnosis Method and Characterization of Fetal Growth in Yangtze Finless Porpoises

Genetic Barcoding of Jellyfish

Parentage Determination of Dabry’s Sturgeon (Acipenser dabryanus) Based on Novel Microsatellite DNA Markets Using Next-Generation Sequencing

Pathogen Diagnosis and Surveillance and Research in Ocean Park Animals

Study of Cooperative Behaviour of the Indo-Pacific Bottlenose Dolphins (Tursiops aduncus) in Ocean Park Hong Kong Using Cognitive Enrichment Items

Study on the Physiology Changes of Cultured Adult Chinese Sturgeon (Acipenser sinensis) During Seawater Adaptation

The Pre-Partum Reproductive Hormonal Profile and Development of Mother-Calf Relationship in Captive Yangtze Finless Porpoise

Training Workshop in Quantitative Spatial Ecology, Movement, and Habitat Utilization Analyses

Twelve Years Later: Outcomes, Enforcement Challenges, and Novel Solutions Following the CITES Appendix II Listing of the Humphead Wrasse (Cheilinus undulates (Napoleon))

VaquitaCPR Ex-Situ Workshop – Lessons Learned Saving Animals From Extinction

Yellow-Bibbed Lory Research Project
Mexico

AFRICAM SAFARI PARK

Education
Amazing Environments: Desert, Forest, and Jungle
Animal Encounter
Biodiversity: Natural Heritage of Everyone
Eco-Systems
Educational Shows
Educational Workshops
Endangered Animals
Extinction: Animals and Plants Disappear
From Day to Night in Nature
Fur, Feathers, Scales, and Leaves
Intellectual Disability Inclusion Program (Naturally Special)
Interpretative Guide Program
Life Cycle
Mexico’s Biodiversity
Mobile Zoo
Move for the Environment
Our Impact on Biodiversity
Our Mission: Saving Ecosystems!
Premium Animal Services
Premium Nocturnal Safari
The Animals... in my House or in the Woods?
The Weather Changes? Better I!
Visually Impaired Program
Warning! Danger of Extinction
Working With Rural Communities

Field Conservation
California Sea Lion Health Assessment
Caribbean Flamingo Conservation Program
Crested Toad Recovery Plan
Golden Eagle Conservation Program
Horned Guan Conservation Program
Masked Bobwhite Quail Recovery Program
Mexican Primates Conservation Program

Socorro Dove Reintroduction Program
Taylor’s Salamander Conservation Project

Green Practices

GREEN PRACTICES IMPLEMENTED
Alternative Fuel Usage for On-Site Fleet
Alternative Transportation Benefits for Staff
Alternative Transportation Discounts for Guests
Building Energy Management
Commingled Recycling
Community Supported Agriculture (CSA) Program for Staff
Community-Based Sustainability Projects
Completed Greenhouse Gas Inventory
Composting (On-Site or Off-Site)
Denitrification Systems On Ground
Energy Submetering
Generated Energy through Anaerobic Digester
Generated Solar or Wind Energy
Graywater Reuse and/or Rainwater Harvesting
Green Building Policy/Commitment
Green Purchasing Policy/Green Procurement
Procured Local Food for On-Site Animals and/or Guest
Smart Building Strategies
Stormwater Management Program
Used Enterprise (IT) Solutions to Track and Measure Sustainability Performance
Wastewater Reduction
Water Submetering
Waterwise Landscaping
United States

Alabama

Birmingham Zoo

Education
Discovery Programs
Preschool at the Zoo

Field Conservation
Chipangali Large Carnivore Project: Zimbabwe
Conservation Initiative of Fishing Cats in Human Dominated Landscape of Bara District, Nepal
Dian Fossey Gorilla Fund International
Eastern Indigo Snake Reintroduction Project
Giraffe Conservation Foundation (GCF)
International Elephant Foundation
Local Bat Conservation
Measuring the Effects of Human Disturbance on Jaguars in Southern Belize (PiCA grant)
Rainforest Rescue – Save the Cassowary
Tarangire Elephant Project
Turtle Survival Alliance

Green Practices

Energy
Documented Amount Spent
Documented Amount Used
Generated Renewable Energy On-Site

Food
Sourced Local Food or Grew it On-Site

Fuel
Documented Amount Spent
Documented Amount Used

Green Practices Implemented
Alternative Fuel Usage for On-Site Fleet
Building Energy Management

Carbon Offsets for Employee Travel
Commingled Recycling
Community-Based Sustainability Projects
Composting (On-Site or Off-Site)
Diverted or Recycled Construction Waste
Energy Submetering
Generated Solar or Wind Energy
Graywater Reuse and/or Rainwater Harvesting
Green Building Policy/Commitment
Procured Local Food for On-Site Animals and/or Guest
Purchased Carbon Offset(s) for On-Site Utility Use
Stormwater Management Program
Waterwise Landscaping

Waste
Documented Amount Recycled
Documented Amount Sent to Landfill

Water
Documented Amount Spent
Documented Amount Used

Research
Examining the Pharmacokinetic Properties of a Sustained-Release Meloxicam Formulation in American Flamingos (Phoenicopterus ruber)
Male African Dominance and Reproduction Study and Hormone Monitoring of Multiple Birmingham Zoo (BZI) Species
Population Study of Black Bears in Alabama
Alaska

ALASKA SEALIFE CENTER

Education
Distance Learning Programs
In-House Day Programs
Nocturne Program
Ocean Sciences Club
Outreach Programs
Road Scholar Programs
Sea Journey
Small Fry School
Teacher Workshops

Field Conservation
Changing Tides – Bivalve Bioassay and Analysis Component (R0107)
Community-Based Coastal Monitoring of Aleutian Islands

Green Practices

ENERGY
Documented Amount Spent
Documented Amount Used
Generated Renewable Energy On-Site
Purchased Renewable Energy

FOOD
Sourced Local Food or Grew it On-Site

FUEL
Documented Amount Spent
Documented Amount Used

GREEN PRACTICES IMPLEMENTED
Building Energy Management
Commingled Recycling
Green Building Policy/Commitment
Green Purchasing Policy/Green Procurement
Procured Local Food for On-Site Animals and/or Guest
Smart Building Strategies

Used Enterprise (IT) Solutions to Track and Measure Sustainability Performance
Water Submetering

GREENHOUSE GAS EMISSIONS
Documented Amount of Greenhouse Gas Emissions

PLANS, POLICIES, AND BUDGETS
Developed or Updated a Sustainability Plan (or Equivalent)
Developed or Updated a Sustainability Plan

WATER
Documented Amount Spent
Documented Amount Used

Research
Assessing Walrus Benthic Prey Base in Bristol Bay, Alaska
Bioenergetics, Movement Behavior, and Temperature Ranges of the Poorly Understood Pacific Sleeper Shark
Comparative Measures of Health and Physiology for Ice-Dependent Alaskan Seals

Eider Flock Maintenance
Instrument Development for Biological Research (IDBR)
Type B: Life-Long Vital Rate Telemetry in Marine Homeotherms
Lactation Bioenergetics, Immune Competence, Age Determination Models, Temperature Patterns, and Fetal Development in Steller Sea Lion Females and Their Pups
Long-Term Monitoring of Trends in Steller Sea Lion Behavior, Ecology, Vital Rates, and Demography Within the Endangered, Western Distinct Population Segment
Reproduction, Survival, and Depredation in Harbor Seals – Phase 1: Validation
Ribbon Seal Physiology and Biology
Arizona

ARIZONA-SONORA DESERT MUSEUM

Education
Amigos del Desierto
Art Institute
ASDM Press
Bat Bridge Programs
Buffelgrass Busters
Coati Club
Colors of Nature Camp
Community Events
Cool Summer Nights
Desert Ark Programs
Desert Discovery Programs (On-Site)
Docent Interpretive Program
Docent Tours
Docent Training and Continuing Education
Earth Conservation Internship
Family Programs “Packrat Programs”
Fur, Feathers, and Fangs
Junior Docent Program
Library Outreach Programs
Live and (Sort of) on the Loose
Museum Explorers Camp
Public Programs
Raptor Free Flight
Senior Programs
Sonorensis
Special Events

Field Conservation
Argentine Cactus Moth Monitoring
Assurance Population: Gila Topminnow
Assurance Population: Quitobaquito Mud Turtles
Assurance Population: Quitobaquito Pupfish
Assurance Population: Sonora Chub
Propagation: Mexican Gartersnake

Propagation: Tarahumara Frog
Salvage: Rio Sonoyta Longfin Dace
Salvage: Tortoise Adoption Program
The Sonoran Desert Cooperative Weed Management Area

Green Practices

ENERGY
Documented Amount Spent
Documented Amount Used
Generated Renewable Energy On-Site

EXTERNAL SUPPORT
Received Support From External Sources for Green Projects

FOOD
Sourced Local Food or Grew it On-Site

FUEL
Documented Amount Spent

GREEN PRACTICES IMPLEMENTED
Alternative Transportation Benefits for Staff
Community Solar Program
Generated Solar or Wind Energy
Graywater Reuse and/or Rainwater Harvesting
Procured Local Food for On-Site Animals and/or Guest
Waterwise Landscaping

PLANS, POLICIES, AND BUDGETS
Developed or Updated a Sustainability Plan (or Equivalent)
Developed or Updated a Sustainability Plan

WASTE
Documented Amount Recycled

WATER
Documented Amount of Wastewater Generated
Documented Amount Used
Field Conservation
A Community-Based Approach to River Turtle Conservation in Guyana
Andean Bear-Human Conflict Areas in the Chingaza Massif, Colombia: Hot Spots, Drivers, and Potential Solutions
Arizona TrailCAM Project
AZA SAFE
Black-Footed Ferret (Mustela nigripes) Propagation and Release Program
Borderlands Connectivity: Field Conservation Research
Borderlands Connectivity: Training and Capacity Building
California Condor Nest Guarding Program
Camera-Traps and Communities Together for Carnivore Conservation in Gajedi Lake of Nepal
Characterization of the Shark Fishery and its Trade in the Pacific of Guatemala
Cheetah Conservation Fund
Chiricahua Leopard Frog (Lithobates chiricahuensis) Headstarting and Release Program
Chiricahua Mountain Assessment of Large Mammal Corridor Use and Drought Impact
Comprehensive Conservation Program for the Critically Endangered Harlequin Frog (Atelopus varius) in the Talamanca Mountains, Costa Rica
Conservation of Amphibians and Livelihoods Under Climate Change in the Sierra Nevada, Colombia
Conservation of the Endemic Chelonians of Sulawesi: Forsten’s Tortoise (Indotestudo forstenii) and Sulawesi Forest Turtle (Leucocephalon yuwonoi)
Continuing to Resolve Conflict Through Communication: Using DVD Shows to Help Reduce Human-Carnivore Conflict Around Ruaha National Park, Tanzania
Developing Assurance Colonies of Threatened Indian Turtles
Dian Fossey Gorilla Fund International
Fighting Destruction of Orangutan Habitat With Healthcare Incentives for Rainforest Guardianship
Giant Anteaters & Highways
Giant Armadillo: A Flagship Species for Biodiversity Conservation
Hirola Conservation Programme – Student Scholarship
Hornbill Research and Conservation
In Pursuit of El Pajuil: A Camera Trap Study of the Critically Endangered Blue-billed Curassow (Crax alberti)
Increasing Profitability Without Killing Rare Carnivores: Empowering Rural Communities in South Africa to Protect Their Livestock Against Predation

Integrating Science and Community Stewardship for Conservation of Critically Endangered Chinese Pangolins (Manis pentadactyla) in the Dolakha District of Nepal

Jaguar Corridor: Connecting National Parks in the Zona Sur, Costa Rica

Las Alturas Threatened Species and Connectivity Research and Recovery Center, Costa Rica

Mariana Avifauna Conservation (MAC)/Pacific Bird Conservation Project

Mount Graham Red Squirrel Propagation and Release Program

Narrow-Headed Gartersnake (Thamnophis rufipunctatus) Propagation for Release

Native Fish Species Reintroduction – Desert Pupfish

Native Fish Species Reintroduction – Gila Topminnow

Next Gen Croc: Fostering the Next Generation of Wildlife Champions

Phoenix Zoo Field Conservation Administration

Population Monitoring for Snow Leopards and Their Prey, South Gobi, Mongolia

Prairie Dog Plague Vaccine Project

Protecting Connectivity Through Citizen Science at Scottsdale’s McDowell Sonoran Preserve

Proyecto Taguá: Chacoan Peccary Health Assessments

Radiated Tortoise Confiscation Support

Rangelands Restoration for the World’s Most Endangered Antelope: the Hirola

Saving Sumatran Tigers by Reducing Tiger-Human Conflict

Springsnail Field Surveys

Support for Conservation Planning Specialist Group (CPSG)

Toward a Better Understanding of Orangutan Adaptation to Human-Made Landscapes

Turtle Survival Alliance (TSA)

University of Arizona/Arizona Center for Nature Conservation (ACNC) – Native Species Conservation Graduate Fellowship

Using Mutual Mate Choice to Improve Reproduction in the Black-Footed Ferret

Using Occupancy Models to Investigate Habitat Use and Illegal Hunting: a Case of Brazilian-Three-Banded-Armadillo

Warriors Protecting Grevy’s Zebra in Laisamis, Northern Kenya

Where do Andean Bears Hide in the Boliviano-Tucumano Region of Bolivia?

Wild Water Project: Evaluating the Impacts of Surface Water Decline on Arid Ecosystems and Wildlife

Wildlife Trafficking Alliance

Green Practices

ENERGY

Documented Amount Spent

Documented Amount Used

Generated Renewable Energy On-Site

FOOD

Sourced Local Food or Grew it On-Site

FUEL

Documented Amount Spent

Documented Amount Used

GREEN CERTIFICATIONS

Certified as a Wildlife Habitat

One or More Buildings LEED-Certified by the US Green Building Council

GREEN PRACTICES IMPLEMENTED

Alternative Fuel Usage for On-Site Fleet

Alternative Transportation Benefits for Staff

Building Energy Management

Commingled Recycling

Composting (On-Site or Off-Site)

Diverted or Recycled Construction Waste

Energy Submetering

Generated Solar or Wind Energy

Graywater Reuse and/or Rainwater Harvesting

Green Building Policy/Commitment

Green Purchasing Policy/Green Procurement

Wastewater Reduction

Waterwise Landscaping
Evaluation of Semen Characteristics in Chacoan preccary
Home Range and Movements of an Established Population of Nonnative, Invasive Pond Sliders at the Phoenix Zoo
Immobilization Protocols and Blood Gas Assessments Pre and Post Administration of Intranasal Oxygen in Chacoan Peccary
Improving Thamnophis rufipunctatus (Narrow-Headed Gartersnake) Detection Using Scent Based Methods: Conservation Scent Dogs and Scent Baited Funnel Traps
Investigating Temperature Dependent Sex Determination of Crotaphytus collaris and Petrosaurus thalassinus

**McDowell Gooseneck Corridor**
Modified Protocol for Sex Identification of In Ovo Avian Embryos as a Cost Effective and Accessible Management Tool for Zoological Institutions

Night Camp Collaboratory
Pathology and Assessment of a Metastatic Sertoli Cell Tumor in a Mexican Gray Wolf Using Anti-Muellerian Hormone Assay

**Pyrgulopsis thompsoni** Habitat Use and Dispersion
Quantitative Comparison of Nonhuman Primate Environmental Enrichment Across US Research Facilities, Sanctuaries, and Zoos: Application of a Standardized Assessment Tool

Research Request Review Committee
Serological Survey for Balamuthia Mandrillaris in Bornean Orangutans

Squamate Sex Determination, Genomics, and Phylogenetics
Tamiasciurus hudsonicus grahamensis (Mount Graham Red Squirrel) Behavior

Tracking Reintroduced Ex-Situ Born Narrow-Headed Gartersnakes

US-Mexico Borderlands – Wildlife Movement and Migration
Why Zoos and Aquariums Matter 3 Data Collection

Wildlife Research Assistant Training Program

**REID PARK ZOO**

Education
Animal Encounter
Behind-the-Scenes Tour
Bio Bags
Camps (Non-Summer, Private, or Winter)

Education Program Animal Presentation
Formal Animal On-Grounds Presentations
Interpretive Station Cart
Little Critters
Nature Play Days at the Zoo
Summer Camp
Teacher Workshop
Young Explorers Programs
Zoo Adventure Program (On-Site School Programs)
Zoo to You Outreach

Field Conservation
Global Conservation Force
International Elephant Foundation (IEF)
International Rhino Foundation (IRF)
IUCN/SSC Tapir Specialist Group
Pantanal Giant Armadillo Project/Giant Anteater Conservation and Monitoring Program
Tarangire Elephant Project
Tucson Wildlife Center
University of Arizona – Andean Bear
Zoo Conservation Outreach Group (ZCOG) – Anteaters and Highways

Green Practices
ENERGY
Generated Renewable Energy On-Site

FOOD
Sourced Local Food or Grew it On-Site

GREEN PRACTICES IMPLEMENTED
Community Solar Program
Composting (On-Site or Off-Site)
Diverted or Recycled Construction Waste
Generated Solar or Wind Energy
Graywater Reuse and/or Rainwater Harvesting
Green Building Policy/Commitment

PLANS, POLICIES, AND BUDGETS
Developed or Updated a Sustainability Plan (or Equivalent)

Research
A Case Report of a Jaguar (*Panthera onca*) With Anemia That was Managed Using Multiple Blood Transfusions
Behavioral Assessment of Zoo-Housed Felids
Face Recognition Technology in Brown Bears
Mortality of Four Captive-Born Crested Screamer Chicks (*Chauna torquata*)
Oleander (*Nerium oleander*) Toxicosis in Two Adult Giraffe (*Giraffa camelopardalis reticulate* and *Giraffa camelopardalis rothschild*)
Serial Ultrasound to Estimate Fetal Growth Curves in Southern Tamandua (*Tamandua tetradactyla*)
Tapir Photo Database for Field Researchers
Why Zoos and Aquariums Matter 3 – STEM Matters

SEA LIFE ARIZONA AQUARIUM
Education
Boy Scouts
Daily Feeds
Daily Talks
Displays Animal Care Development
Education Development
Girl Scouts – Brownies
Girl Scouts – Cadets
Girl Scouts – Daises
MACS Conservation Workshop
Plastic Oceans

Field Conservation
Arizona – Salt River Apple Snail

Green Practices
WASTE
Documented Amount Recycled
Documented Amount Sent to Landfill

Research
Aquaculture *Tubastrea auresia*
Arizona Salt River Apple Snail Survey
Arkansas

LITTLE ROCK ZOO

Field Conservation
American Association of Zoo Keepers (AAZK) – Bowling for Rhinos/Winos for Rhinos
Appalachian Bear Center
Arkansas Monarch Conservation Partnership
Arkansas Natural Heritage Commission
Asian Elephant Support (AES)
AZA Conservation Grants Fund (CGF)
AZA Jaguar SSP – Cockscomb Basin Wildlife Sanctuary (CBWS)
AZA SAFE – Cheetah
AZA SAFE – Conservation Action Plan (CAP)
AZA Tiger SSP – Tiger Conservation Campaign
Bornean Sun Bear Conservation Centre (BSBCC)
Cheetah Conservation Fund (CCF)
Conservation Centers for Species Survival (C2S2)
Dian Fossey Gorilla Fund International
Got Scat?
Goualougo Triangle Ape Project (GTAP)
International Bear Association
International Elephant Foundation (IEF)
International Rhino Foundation (IRF)
IUCN/SSC Conservation Planning Specialist Group (CPSG)
Lemur Love – Reniala Lemur Rescue Center
New Nature Foundation – Kibale Fuel Wood Project
Pan African Sanctuary Alliance
Partners in Conservation
Pryor Mountain Wild Mustang Center
Rainforest Alliance
Raptor Rehab of Central Arkansas
Save the Lemurs
Southern African Foundation for the Conservation of Coastal Birds (SANCCOB)
The Attwater Prairie Chicken Refuge
The Clouded Leopard Project
The Orianne Society

Turtle Survival Alliance (TSA)
Wildlife SOS

Green Practices

ENERGY
Documented Amount Spent
Documented Amount Used

FOOD
Sourced Local Food or Grew it On-Site

FUEL
Documented Amount Spent
Documented Amount Used

GREEN PRACTICES IMPLEMENTED
Alternative Fuel Usage for On-Site Fleet
Commingled Recycling
Composting (On-Site or Off-Site)
Green Purchasing Policy/Green Procurement
Procured Local Food for On-Site Animals and/or Guest
Stormwater Management Program
Waterwise Landscaping

PLANS, POLICIES, AND BUDGETS
Developed or Updated a Sustainability Plan (or Equivalent)
Developed or Updated a Sustainability Plan

WASTE
Documented Amount Composted
Documented Amount Recycled
Documented Amount Sent to Landfill

WATER
Documented Amount Spent
Documented Amount Used
Research
Arthritis Markers in Elephants
AZA SSP – Collection of Samples and Records for SSP: Endorsed Studies
Biomaterials Use in Zoos
Evaluating Variation in Soil Composition Among Habitats at the Little Rock Rock Zoo

California

AQUARIUM OF THE BAY
Field Conservation
Rivers and Estuaries

Green Practices
FUEL
Documented Amount Spent

GREEN PRACTICES IMPLEMENTED
Alternative Transportation Benefits for Staff
Commingled Recycling
Community-Based Sustainability Projects
Composting (On-Site or Off-Site)
Diverted or Recycled Construction Waste
Green Building Policy/Commitment
Green IT
Green Purchasing Policy/Green Procurement
Wastewater Reduction

PLANS, POLICIES, AND BUDGETS
Dedicated a Line Item in the Budget for Green Practices

WASTE
Documented Amount Composted
Documented Amount Recycled
Documented Amount Sent to Landfill

WATER
Documented Amount of Wastewater Generated
Documented Amount Spent
Documented Amount Used

AQUARIUM OF THE PACIFIC
Education
Bay Lab Animal Ambassador Programs
Bay Lab Public Programs
BayMobile Outreach Programs
Exploration Tours
Hybrid Ferry Programs
Public Programs – Feedings
Public Programs – Non-Feedings
Self-Guided Tours
Shoreline Clean-Up Events
Sleepovers
Special Public Program Events
Trout in the Classroom Collaboration

Field Conservation
AZA Guam Kingfisher SSP
Great Lakes Piping Plover Recovery Effort
Mariana Avifauna Conservation (MAC) Project
Reef Check Surveys
Sea Turtle Rehabilitation
SEXual CORal REproduction (SECORE) – Coral Reef Reproduction and Restoration Project
SEXual CORal REproduction Silver Partnership (SECORE)
Southern African Foundation for the Conservation of Coastal Birds
Southern California Thermograph Array Project
Spotting Giant Sea Bass
Vaquita Conservation Through Education and Market Incentives
White Abalone Captive Breeding Project
White Abalone Habitat Monitoring With National Oceanic and Atmospheric Administration (NOAA) and National Marine Fisheries Service (NMFS)
White Abalone Module Testing

Green Practices
ENERGY
Documented Amount Used
FOOD  
Sourced Local Food or Grew it On-Site

WASTE  
Documented Amount Recycled
Documented Amount Sent to Landfill

WATER  
Documented Amount of Wastewater Generated
Documented Amount Used

Research  
Artificial Insemination in Blacktip Reef Sharks (Carcharhinus melanopterus)
Artificial Insemination in Sand Tiger Sharks
Artificial Insemination Techniques in Bamboo Sharks (Chiloscyllium plagiosum and Chiloscyllium punctatum)
Landscape Analysis of Aquaculture Outreach Survey
Southern California Sea Turtle Monitoring Project

B. BRYAN PRESERVE  
Field Conservation  
Giraffe Conservation Foundation (GCF)
Grevy’s Zebra Trust

Green Practices  
GREEN PRACTICES IMPLEMENTED  
Commingled Recycling
Composting (On-Site or Off-Site)
Generated Solar or Wind Energy

BIRCH AQUARIUM AT SCRIPPS INSTITUTION OF OCEANOGRAPHY  
Field Conservation  
Animal Sanctuary
Capacity Building and Specialty Training – Multiple Marine Conservation Projects
Conservation Education Through Outreach Scholarships
Coral Conservation
Coral Conservation Through High School Education
Husbandry Capacity Building and Training of Multiple Institutions
Sea Turtle Education Conservation and Sanctuary
SEACAMP Outreach Education Support
Syngnathidae Conservation
Veterinarian Support

Research  
Aequorea victoria Jellies Research in Benefit of Human Medical Research
Comparison of Radiographic, Ultrasound, and Magnetic Resonance Imaging for the Detection of Retained Stingray Foreign Body: an In Vitro Study
Coral Research/Conservation
Distinct Microstructure of the Dermal Denticles of Three California Shark Species
Kelp Forest Sound and Underwater Imaging Projects
San Diego Zoo Sperm Atlas
Scripps Institution of Oceanography – Pier Data Analysis
Syngnathid Research

CABRILLO MARINE AQUARIUM  
Field Conservation  
Biannual Survey of Intertidal Marine Life at Point Fermin Marine Life Refuge, Los Angeles County, California
Cabrillo Coastal Park Survey
Cabrillo Salt Marsh Survey
Combfish Husbandry
Garibaldi Aquaculture, Territorial Behavior, and Conservation
Grunion Greeters
Peninsula Shorewatch
White Abalone Husbandry and Conservation

Green Practices  
FOOD  
Sourced Local Food or Grew it On-Site

PLANS, POLICIES, AND BUDGETS  
Developed or Updated a Sustainability Plan (or Equivalent)
**Research**
- Copepod Aquaculture
- Grunion Aquaculture
- Pacific Seahorse Husbandry and Development
- Rotifer Aquaculture

**CALIFORNIA SCIENCE CENTER**

**Field Conservation**
- Reef Check California Recertification and Surveys
- Survey of Southern Steelhead

**Green Practices**

**ENERGY**
- Documented Amount Spent
- Documented Amount Used

**FOOD**
- Sourced Local Food or Grew it On-Site

**FUEL**
- Documented Amount Spent
- Documented Amount Used

**GREEN PRACTICES IMPLEMENTED**
- Alternative Transportation Benefits for Staff
- Building Energy Management
- Commingled Recycling
- Completed Greenhouse Gas Inventory
- Composting (On-Site or Off-Site)
- Denitrification Systems On Ground
- Energy Submetering
- Green Building Policy/Commitment
- Green IT
- Green Purchasing Policy/Green Procurement
- Water Submetering

**GREENHOUSE GAS EMISSIONS**
- Documented Amount of Greenhouse Gas Emissions

**PLANS, POLICIES, AND BUDGETS**
- Developed or Updated a Sustainability Plan (or Equivalent)

**WASTE**
- Documented Amount Recycled
- Documented Amount Sent to Landfill

**WATER**
- Documented Amount Spent
- Documented Amount Used

**Research**
- Catalina Marine Society Thermograph Array
- Diversity Initiative for the Southern California Ocean (DISCO)

**CHARLES Paddock ZOO**

**Field Conservation**
- Confiscated Turtle Program
- Pacific Pond Turtle Program
- Quarters for Conservation

**CURIODYSSEY**

**Education**
- Afterschool Science Adventures Mid-Peninsula Boys & Girls Club
- CuriOdyssey Summer Camp
- Fiesta Garden School Program
- Homeschool Science Discovery
- LEAD School Program
- Physical and Life Science Workshops
- Science Explorers
- Self-Guided Visits
- Teacher Personal Development Workshop
- Weekend Workshops
- Wildlife Presentations
- Winter & Spring Camp
Field Conservation
AZA FrogWatch USA
Bay Area Bobcat Study
Coyote Point Beach Clean Up
Marsh Habitat Restoration Project – Removal of Invasive *Limonium ramosissimum*
Pacific Tree Frog (*Pseudacris regilla*) Garden Habitat Project
River Otter Ecology Project

Green Practices
ENERGY
Documented Amount Spent
Documented Amount Used
Purchased Renewable Energy

FOOD
Sourced Local Food or Grew it On-Site

GREEN PRACTICES IMPLEMENTED
Commingled Recycling
Community-Based Sustainability Projects
Composting (On-Site or Off-Site)
Green Purchasing Policy/Green Procurement
Procured Local Food for On-Site Animals and/or Guest
Purchased Green Power or Renewable Energy Credits (RECs)

PLANS, POLICIES, AND BUDGETS
Developed or Updated a Sustainability Plan (or Equivalent)
Developed or Updated a Sustainability Plan

Research
Experimental Restoration at Coyote Point Marsh
Landscape Genetics and Habitat Fragmentation of a Vulnerable Californian Valley Mesocarnivore – the Ringtail (*Bassariscus astutus*)
Urban Wildlife Project: Bay Lands Gray Fox Project
Western Pond Turtle (*Emys paliida*, formerly *Emys marmorata paliida*) Ecology and Conservation in Central California

FRESNO CHAFFEE ZOO
Education
Ask Me Cart
Beach Cleanup
Birthday Presentations
Community Events
Group Behind the Scenes
Individual Behind the Scenes
Overnight Safari
Raptors
School Lab Programs
Story Time
Teacher Workshops
Teen LEADERS (Lead by Educating With Activities and Demonstrations on the Environment, Resources, and Sciences)
Tot Time
Valley Farm Outreach
Zoo Camp
Zoo Preview
Zoo Talks
Zoo Tour
ZOOMobile

Field Conservation
Ambassadors Schools Network
Assessing the Current Population Status of Abbott’s Starlings
AZA Ape TAG – Conservation Initiative
AZA Sloth Bear SSP
AZA Tiger SSP – Malayan Tiger Project
AZA Western Pond Turtle SSP – Genetic Testing for Species Identification
Bat Monitoring and Conservation Assessment in the Central Valley
Bay Area Puma Project
Brazilian Amphibian Documentation
California Condor Nest Guarding Program
Chacoan Peccary Project
Cheetah Adaptations in Varied Land-Use Regions of Kenya
Community Based Habitat Restoration for the Critically Endangered Guatemalan Beaded Lizard
Community Education for Cheetah and Carnivore Conservation in the Kalahari
Community Guardianship for the Sustainable Conservation of Himalayan Musk Deer
Community-Based Elephant Conservation at the Eyumojok-Korup Reserve
Community-Based Grevy’s Zebra Conservation in Northern Kenya
Connecting Wildlife Through Zambia’s Transboundary Wildlife Movement Corridors
Conservation of Threatened Cavity-Nesting Birds in Argentina
Conserving Grauer’s Gorillas in Itombwe Nature Reserve
Conserving the African Wild Dog
Critically Endangered Gyps Vulture Conservation through Safe Zone Project
Friends of the Island Fox Support for Channel Islands National Parks
Guinea High Forest Sanctuary
International Rhino Foundation (IRF)
Iringa Red Colobus Monkey
Kibale Fuel Wood Project
King Cobra
Lowland Tapir Conservation Initiative – Pantanal Tapir Program
Margay
Marsh Deer
Mount Cameroon Francolin
Olive Ridley Sea Turtle
Pangolin Management in Côte d’Ivoire
Pantanal Giant Armadillo Project
Population Status of the Endangered Ashy Red Colobus Monkey
Primate Inventory and Conservation in Ikpa River Basin
Promoting Chimpanzee Conservation Through Education Programs in Uganda
Radiated Tortoise Rescue and Rehabilitation in Madagascar
Red Wolf Film
Reticulated Giraffe Project
Ruaha Carnivore Project (RCP)

Saving the Chinese Pangolin
Tarangire Elephant Project (TEP)
Ungulate Antipredator Responses to Perceived Risk of Amur Tiger Predation
VulPro
Vulture Poisoning Response
West African Crocodile Assessment
Whale Shark Conservation

Green Practices

GREEN PRACTICES IMPLEMENTED
Community Solar Program
Composting (On-Site or Off-Site)
Diverted or Recycled Construction Waste
Procured Local Food for On-Site Animals and/or Guest
Stormwater Management Program

HAPPY HOLLOW ZOO

Field Conservation
Chaco Jaguar Project
Cheetah Conservation Fund (CCF)
Progress for Pollinators
Quarters for Conservation: Virunga National Park *No longer Heart of the Congo
Red Panda Network
Ruaha Carnivore Project (RCP)

Green Practices

ENERGY
Generated Renewable Energy On-Site

EXTERNAL SUPPORT
Received Support From External Sources for Green Projects

FOOD
Sourced Local Food or Grew it On-Site

GREEN CERTIFICATIONS
Certified as a Wildlife Habitat
One or More Buildings LEED-Certified by the US Green Building Council
PLANS, POLICIES, AND BUDGETS
Developed or Updated a Sustainability Plan (or Equivalent)

LOS ANGELES ZOO AND BOTANICAL GARDENS
Education
California Condor Rescue Zone
Duttenhaver Conservation Field Study Student Fellowship
Elephant Training Demonstration
Family Classes
Family Overnights
Los Angeles Zoo Camp
Scout Overnights
Zoo Pals

Field Conservation
Amakhala Mounted Anti-Poaching Unit
Black-Winged Starling Conservation in Indonesia
Bushmeat Education at Limbe Wildlife Center
California Condor Recovery Project – Rear and Prepare for Release to the Wild
Community Conservation to Protect Critical Orangutan Habitat in Sabangau, Central Kalimantan, Indonesia
Conservation of Armenian Vipers (Montivipera raddei) Inhabiting Anthropogenic Modified Landscapes
Conservation of Egyptian Vultures
Drill Conservation on the Island of Bioko
Drill Rehabilitation and Breeding Center (DRBC)
Finding and Providing Appropriate Conditions Under Which to Hold the Endangered Southern Mountain Yellow-Legged Frog
Giant Otter (Pteronura brasiliensis) Coexistence With People in the Peruvian Amazon
Gorilla Rehabilitation and Conservation Education (GRACE) Center
Harpy Eagle Conservation and Research
Human-Elephant Conflict in Cambodia
IUCN/SSC Asian Wild Cattle Specialist Group – Saola Working Group – Saola Conservation Project
Minimizing the Conflict Between Asian Elephants and Local Villagers
Okapi Conservation Project
Painted Dog Kavango Zambezi Trans-Frontier Satellite and Anti-Snare Collar Fieldwork
Paso Pacífico – Paso del Istmo Jaguar Conservation Project
Philippine Threatened Hornbills Conservation Project (Panay Island)
Proyecto Taguá/Chaco Center for Conservation and Research (CCCR)
Remote Monitoring of Red Uakari Monkeys and Hunting on the Yavari River, Peru
Sahara Conservation Fund
Saiga Conservation Alliance
Sanctuary Staff Training in Cameroon
Turtle Survival Alliance (TSA)

Research
Assessing Effects of Evening Events on Daytime Behavior of Zoo Residents
Changes in Conservation Caring With Different Experiences
Changes in Orientation of Asian Elephants as Social Introductions Proceed
Development of Rapid Facial Mimicry (RFM) in Chimpanzees
Do Chimpanzees Spontaneously Engage in Empathetic Yawning?
Effects of Zoo and Nature Experiences on Stress Reduction
Evaluation of Animals and Their Exhibits
Gorilla Activity and Social Interactions
Play in Chimpanzees
Relationship Between Available Space and Elephant Activity

MONTEREY BAY AQUARIUM
Education
Auditorium Programs
Discovery Labs School Program
Education Conferences

Field Conservation
Aquarium Conservation Partnership (ACP)
Conservation and Science Program Administration
Conservation Research Program Administration
Migratory Movements, Depth, and Temperature Preferences of Dolphinfish (Coryphaena hippurus) Along the Western Baja California Coast of Mexico
Natural History of Mobulid Rays in the Gulf of California
Ocean Conservation Policy
Ocean Sunfish Research
Pacific Bluefin Tuna
SANCCOB Professional Volunteers
Satellite Tagging to Reveal the Early Life History of Steelhead Kelts on California’s Central Coast
Sea Otter Program
Seafood Watch
Sevengill Shark Research
Shorebird and Seabird Rehabilitation
Subtidal Diver Stewardship
White Shark Research

Green Practices

ENERGY
Documented Amount Spent
Documented Amount Used
Purchased Renewable Energy

FOOD
Sourced Local Food or Grew it On-Site

GREEN PRACTICES IMPLEMENTED
Alternative Transportation Benefits for Staff
Building Energy Management
Commingled Recycling
Community Supported Agriculture (CSA) Program for Staff
Community-Based Sustainability Projects
Completed Greenhouse Gas Inventory
Composting (On-Site or Off-Site)
Denitrification Systems On Ground
Diverted or Recycled Construction Waste
Energy Submetering
Generated Energy through Anaerobic Digester
Green Building Policy/Commitment
Green IT

Green Purchasing Policy/Green Procurement
Procured Local Food for On-Site Animals and/or Guest
Purchased Carbon Offset(s) for On-Site Utility Use
Smart Building Strategies
Stormwater Management Program
Water Submetering
Waterwise Landscaping

GREENHOUSE GAS EMISSIONS
Documented Amount of Greenhouse Gas Emissions

PLANS, POLICIES, AND BUDGETS
Dedicated a Line Item in the Budget for Green Practices
Developed or Updated a Sustainability Plan (or Equivalent)
Developed or Updated a Sustainability Plan

WASTE
Documented Amount Composted
Documented Amount Recycled
Documented Amount Sent to Landfill

Research
Deep Sea Cephalopods
Marine Macroalgae – Ecosystem Indicators of Historic Conditions
Pelagic Red Crab Gut Contents: Plastics Study
Use of Non-Invasive Methods to Evaluate Stress in Iconic Fish and Invertebrates
Visitor Research
Whole Genome Sequencing of the Sea Otter

OAKLAND ZOO
Field Conservation
Africa Matters
Amboseli Trust for Elephants
Animals Asia
Arroyo Viejo Creek On-Site Restoration Project
Asociación de Rescate y Conservación de Vida Silvestre (ARCAS)
AZA Puerto Rican Crested Toad SSP
Bay Area Puma Project – Felidae Conservation Fund
BEAR League
Big Life Foundation
Bornean Sun Bear Conservation Centre (BSBCC)
Budongo Snare Removal Project
California Condor Recovery Program
California Wolf Center
Centre ValBio at Stony Brook University
Cheetah Conservation Fund (CCF)
David Sheldrick Wildlife Trust
Elephant Voices
Golden Gate Audubon Society
Hornbill Research Foundation (HRF) – Nest Adoptions in Thailand
Innii Initiative
Kaminando Habitat Connectivity Initiative
Kibale Bead Community Action Project
Kibale Fuel Wood Project
Lubee Bat Conservancy
Marine Mammal Center
Mountain Lion Foundation
Mountain Yellow-Legged Frog Project
Oakland Zoo Heron Initiative
Oakland Zoo Mountain Lion Initiative
People and Carnivores
Proyecto Tití
Reticulated Giraffe Project
Save the Elephants
SaveNature.Org – Rainforest Conservation Parking Meter
Turtle Survival Alliance
Uganda Carnivore Program
Ventana Wildlife Society
WCN – Elephant Crisis Fund
Western Pond Turtle Headstart Program (On-Site)
Wildlife Conservation Network (WCN) – Ewaso Lions
Wildlife Conservation Society (WCS) – 96 Elephants
Wildlife Conservation Society (WCS) – Tiger Project

Green Practices

FOOD
Sourced Local Food or Grew it On-Site

GREEN CERTIFICATIONS
Certified as a Wildlife Habitat
One or More Buildings LEED-Certified by the US Green Building Council

GREEN PRACTICES IMPLEMENTED
Alternative Fuel Usage for On-Site Fleet
Building Energy Management
Commingled Recycling
Community Solar Program
Community-Based Sustainability Projects
Composting (On-Site or Off-Site)
Diverted or Recycled Construction Waste
Generated Solar or Wind Energy
Graywater Reuse and/or Rainwater Harvesting
Green Building Policy/Commitment
Green IT
Green Purchasing Policy/Green Procurement
Procured Local Food for On-Site Animals and/or Guest
Wastewater Reduction
Waterwise Landscaping

PLANS, POLICIES, AND BUDGETS
Developed or Updated a Sustainability Plan (or Equivalent)
Developed or Updated a Sustainability Plan

WASTE
Documented Amount Composted
Documented Amount Recycled
Documented Amount Sent to Landfill

Research
Determining Qualitative Behavioral Assessment (QBA) as a New Method of Evaluating Animal Welfare
Investigating Wide-Scale Patterns in Urban Wildlife Distributions in Alameda County, California
Ursid Tooth Mark Taphonomy
SACRAMENTO ZOO

Education
Animal Encounters
Behind-the-Scenes Tours
Career Talks
Discovery Room
Docent Presentation Stations
Docent Training
Family and Group Overnights
Keeper Chats
Little Peeps Preschool Classes
Nature Explorers
Resource Library and Zoo Animal Fact Sheets
Roots & Shoots Teen Program
School & Group Field Trips
Special Events Such as Boo at the Zoo and Party For The Planet
Starlight Safaris
Summer Camp
Survive and Thrive Animal Adaptation Show
Tea & Tours
Teacher Resources
Teen Public Education Tables
Zoo Mobile

Field Conservation
2017 A Day in the Park
2017 Securing Population Status Yellow Billed Stork
2018 Mountain Yellow Legged Frog Conservation
2018 Wild Tracks
African Wildlife Foundation
American Association of Zoo Keepers (AAZK) – Bowling for Rhinos
Amphibian Ark
AZA Jaguar SSP – Cockscomb Basin Wildlife Sanctuary (CBWS)
AZA SAFE – Western Pond Turtle
AZA SAFE Giraffe Program
AZA Tiger SSP – Tiger Conservation Campaign: Sumatran Tiger
Biodiversity Conservation Organization – Conserving Southern Ground Hornbill Through Local Capacity Building
Biodiversity Conservation Organization – Mitigating Human/Lion Conflict in Meru National Park Kenya With Community Involvement
Building Community Capacity Conserving Golden Rumped Elephant Shrews in Arabuko Sokoke Forest Kenya
CLAWS Human Lion Co-Existence Community Participation and Training
Dhartee Development Society – Critically Endangered Gyps Vulture Conservation
Eco Kenya Monitoring Yellow Spotted Tree Frog in Arabuko Sokoke Forest Kenya Through Community Involvement
Felidae Conservation Fund/Bay Area Puma Project
Food Procurement for Rehabilitation Centers
Garter Snake Ecology Studies
Grevy’s Zebra Trust
Hornbill Research Foundation (HRF) – Nest Adoptions in Thailand
International Bird Rescue
Itombwe Generation Pour l’Humanite Conserving the Eastern Chimpanzee in the Itombwe Reserve
IUCN/SSC Conservation Planning Specialist Group (CPSG)
Lemur Conservation Foundation
Mabula Ground Hornbill Project (MGHP)
Madagascar Fauna and Flora Group (MFG)
Mitigating Human Leopard Conflict in Maasai Mara
Mountain Lion Foundation – Citizen Science for Mountain Lions on the Cosumnes River Preserve
New Nature Foundation (NNF) – Sustainable Innovations With Wildlife-Neighboring Communities in Uganda
Okapi Conservation Project
Orangutan Outreach
Pan African Sanctuary Alliance (PASA) – Conservation Educators Workshop
Pantanal Giant Armadillo Project
Paso Pacifico Stopping Illegal Trade of Sea Turtle Eggs
Red Panda Network (RPN)
Ring Tail Live Trapping Morphometrics and Radiotelemetry Workshop
Sahara Conservation Fund (SCF)
Seafood Watch
Shared Conservation Biologist
Snow Leopard Conservancy (SLC)
Snow Leopard Trust (SLT)
SURUDEV - Conservation Education, Field Survey of Birds Species Disappearance, Ako-Mbembe Forest Reserve and Kilum-Ijim Forest of the Bamenda Highlands, North West Region of Cameroon
Szinda Nature School Painted Dog Research Trust
Tropical Research and Conservation Center Primate Inventory and Conservation in Ikpa River Basin Nigeria
Tuleyome California Naturalist in-Situ Citizen Science Project
Turtle Survival Alliance (TSA)
Union Island Gecko Conservation Program
Vulture Conservation Programme (VulPro)
Wangechi Marine Biodiversity Evaluating the Distribution, Ecology, and Movement of Straw Colored Fruit Bat in Kakamega Forest Kenya
Wild Nature Institute - Masai Giraffe Conservation Demography
WildAid - Shark Savers
Wildlife Care Association
Wildlife Conservation Expo
Zoo Conservation Outreach Group (ZCOG)

Green Practices

ENERGY
Documented Amount Spent
Documented Amount Used
Generated Renewable Energy On-Site
Purchased Renewable Energy

FOOD
Sourced Local Food or Grew it On-Site

FUEL
Documented Amount Used

GREEN PRACTICES IMPLEMENTED
Alternative Fuel Usage for On-Site Fleet
Carbon Offsets for Employee Travel
Commingled Recycling
Composting (On-Site or Off-Site)

Generated Solar or Wind Energy
Green IT
Procured Local Food for On-Site Animals and/or Guest
Purchased Carbon Offset(s) for On-Site Utility Use
Purchased Green Power or Renewable Energy Credits (RECs)
Smart Building Strategies
Wastewater Reduction
Waterwise Landscaping

PLANS, POLICIES, AND BUDGETS
Dedicated a Line Item in the Budget for Green Practices

WASTE
Documented Amount Composted
Documented Amount Recycled
Documented Amount Sent to Landfill

WATER
Documented Amount Spent
Documented Amount Used

Research
2018 Allostatic Load Stress in Great Apes
2018 Giraffe Improvest Trial
2018 Great Ape Interactive Technology
2018 Ground Hornbill Husbandry Survey
2018 Pharmacokinetics of Single and Multiple Dose Subcutaneous Voriconazole in Healthy Western Pond Turtles (Actinemys marmorata)
2018 Red Panda Mucoid Stool Survey
2018 Sloth Genetic Testing
2018 Snow Leopard Eye Diseases
2018 Western Pond Turtle Genetic Survey of Captive Population
Amdovirus Investigation in Red Pandas
Clinical Medicine Research Publications
Kurtz - Bear Stress Physiology Study
SAFARI WEST WILDLIFE PRESERVE

Education
Conservation Dinner Series
Guided Safari Tour
Husbandry Internship
Off-Site Presentations
Research Internship
Safari Summer Kids Camp
Safari Trek Field Trip

Field Conservation
African Wildlife Foundation
Andean Cat Alliance
Ape Action Africa
Bonobo Conservation Initiative
California Academy of Sciences
California Wolf Center
Cheetah Conservation Botswana
Cheetah Conservation Fund (CCF)
Claws Conservancy
Cornell Lab of Ornithology
Ewaso Lions
Global Penguin Society
Grevy's Zebra Trust
Hungry Owl Project
International Rhino Foundation (IRF)
Lion Recovery Fund
Litterati
Marine Mammal Center
MYCAT
Napa Solano Audubon Society
National Wildlife Federation (NWF)
Native Songbird Care & Conservation
North Coast Resource Conservation and Development Council
Okapi Conservation Project
Pacific Manta Research Group
Painted Dog Conservation
Paso Pacifico

Paula Lane Action Network
Planet Bee
Point Blue Conservation Science
Proyecto Tití
River Otter Ecology Project
Rwanda Wildlife Conservation Association
Sahara Conservation Fund
Save The Snakes
Save Vietnam Wildlife
SaveNature.Org
Shark Stewards
Small Wild Cat Education and Conservation Fund
Snow Leopard Conservancy
The Bird Rescue Center
The Bonobo Project
Urban Wildlife Research Project
Wild Aid
Wild Nature Institute - Project Giraffe
Wildcare Bay Area
Wildlife Conservation Network
Wildlife Rescue Sonoma County
World Parrot Trust (WPT)
Worth a Dam - Martinez Beavers

Green Practices

FOOD
Sourced Local Food or Grew it On-Site

GREEN PRACTICES IMPLEMENTED
Composting (On-Site or Off-Site)
Graywater Reuse and/or Rainwater Harvesting
Procured Local Food for On-Site Animals and/or Guest
Stormwater Management Program
Wastewater Reduction
Waterwise Landscaping

WASTE
Documented Amount Composted
Documented Amount Recycled
Documented Amount Sent to Landfill
**Research**

Occuancy and Turnover of Native Fauna

**SAN DIEGO ZOO GLOBAL**

**Education**

Institute Advanced Inquiry Program
Institute – Conservation Education Lab School Visits
Institute – Outdoor Learning Lab
Institute – Summer Teacher Workshops in Conservation Science
Price Family Watershed Heros
Safari Park – Behind-the-Scenes Safari
Safari Park – Caravan Safari
Safari Park – Cart Safari
Safari Park – Conservation Corp
Safari Park – Conservation in Action
Safari Park – Fur, Feathers, and Scales
Safari Park – Roar & Snore Safari
Safari Park – Safari Express
Safari Park – Save Our Aquatic Resources
Safari Park Self Guided Field Trips
Safari Park Summer Camp
Safari Park – Tram
Safari Park – Wildlife Education and Conservation Action Reaching Everyone (WECARE)
San Diego Zoo Kids
Zoo – Animals in Action
Zoo – Aussie Outback Birthday Bash
Zoo – Be a Bug’s Buddy
Zoo – Classic Summer Camp
Zoo – Critter Coverings
Zoo – Cub Camp
Zoo – Discovery Tours
Zoo – Early Morning With Pandas
Zoo – Epic Teen Camp
Zoo – Exclusive VIP Experience
Zoo – Expeditionary Learning Program
Zoo – Girls in Science
Zoo – Guided Bus Tour
Zoo – Healing Animal Arts
Zoo – Inside Look Tours
Zoo – Inside Story Tour
Zoo – Internquest
Zoo – Kids Free Month
Zoo – KinderZoo
Zoo – Little Artists
Zoo – Outreach Assembly and Classroom Programs
Zoo – School in the Park
Zoo – Second Grade Adaptations Connections
Zoo – Self Guided School Field Trips
Zoo – Special Tours
Zoo – Summer Art Camp
Zoo – Sunrise Surprise Strolls
Zoo – Watershed Heroes
Zoo – Wild Heroes
Zoo – Wildlife Conservancy Tour
Zoo – Wildlife Overnights
Zoo – Winter Educator Preview
Zoo – Zoo Corps
Zoo – ZooTV: Video-Conference Connection in Your Classroom

**Field Conservation**

African Penguin Conservation
An Adaptive Management Approach to Recovering Burrowing Owl Populations and Restoring a Grassland Ecosystem
Andean Bear Conservation Research – Building Capacity in Peru
Andean Condor Recovery in Colombia, South America
Anegada Iguana Recovery Program
Aye-Aye Dispersal Patterns
AZA Andean Condor SSP – Colombian Reintroduction Program
AZA Grand Cayman Blue Iguana SSP – Population Management and Recovery Program
AZA Jamaican Iguana SSP – Population Management and Recovery Program
AZA Okapi SSP – Consortium
Behavior, Ecology, and Conservation of Gelada Baboons
Behavioral Ecology and Conservation of Andean Bears in Peru
Behavioral Ecology and Reintroduction of the Tasmanian Devil
Cactus Scrub Habitat Enhancement and Cactus Wren Monitoring
California Condors and Endocrine Disruptors
California Least Tern and Western Snowy Plover Conservation Program
Captive Breeding and Reintroduction of the San Clemente Loggerhead Shrike
Central Africa Program
Cheetah Conservation
Chinese Dhole Recovery
Coastal Sage Scrub Restoration and Biodiversity Monitoring at the Safari Park
Collaborative Conservation Research for Sloth Bears
Combatting the Illegal Trade in Asiatic Black Bears and Bear Parts in Southeast Asia
Conservation and Captive Rearing of the Critically Endangered Mangrove Finch
Conservation and Ecology of Wild Giant Panda Populations
Conservation Breeding and Reintroduction of the Critically Endangered Pacific Pocket Mouse
Conservation Breeding and Release of the Aga or Mariana Crow
Conservation Breeding of the Giant Panda
Conservation Ecology of the Sun Bear
Conservation Management of Leopards in Northern Kenya’s Rangelands: Integrating Ecology and Social Science Into Community-Based Conservation
Conservation of the Quino Checkerspot Butterfly
Conserving Endangered Vultures in Northern Kenya: Taking Action Against Key Threats
Desert Tortoise Health
Dian Fossey Gorilla Fund International
Disease Modeling and Tasmanian Devils
Effects of Roads on Space Use, Habitat Selection, Diet, Population Dynamics, and Health of Ringtails in Rural San Diego County
Effects of Wind Turbines on Golden Eagles and Condors in Northern Baja California, Mexico
Enhancing California Condor Genetic Management
Ewaso Conservation Company – Lion Scouts
F.E. Falz-Fein Biosphere Reserve
Fiji Iguana Conservation
Galápagos Pink Land Iguana Recovery Program
Gelada Ecology and Conservation
Gharial Conservation Fund
Giant Panda Conservation – Disease Surveillance and Risk Assessment in China
Grevy’s Zebra Trust
Hawaii Endangered Bird Conservation Program
Hornbill Research Foundation (HRF)
Human Dimensions of Lion Conservation
Human-Wildlife Coexistence With Jaguars in the Bolivian Amazon
International Rhino Foundation (IRF)
Investigating Ecological and Health Requirements for Long-Term Sustainability of Coastal Patch-Nosed Snake Populations
Investigating the Role of Disease in Declining Thick-Billed Parrot Populations in Northern Mexico
IUCN/SSC Tapir Specialist Group
Jaguar Costa Rica Corridor Research
Jungle Friends Primate Sanctuary, Inc.
Koala Management, Education, and Conservation Program
Las Californias Linkages for Large Mammals: Peninsular Bighorn Sheep in Baja California, Mexico
Light-Footed Clapper Rail Reintroduction Program
Living With Elephants – Conservation and Human Dimensions Efforts
Living With Elephants – Conservation, Communities, Rescues, and Human Dimensions
Madagascar Fauna and Flora Group (MFG)
Management of the Cocha Cashu Biological Station in Manu, Peru
Molecular Conservation Genetics: Development and Application to Management of Captive and Wild Populations
Mountain Yellow-Legged Frog Recovery Program
New Technologies in Support of Grevy’s Zebra Conservation: Integrating Genomes, Microbiomes, Parasites, Diets, and Demography
Northern Rangelands Trust – Black Rhino Translocation to Sera Community Conservancy
Northern Rangelands Trust – Ishaqbini Hirola Community Conservancy Project
Northern Rangelands Trust – West Gate Community Conservation
Northern White Rhinoceros Initiative
Okapi Conservation Project
Peninsular Pronghorn Recovery Program
Peregrine Fund – Wildlife Poisoning Response Training
Point Loma Nazarene University (PLNU) – Project Jaguar and Other Predators of the Talamanca
Point Loma Nazarene University Summer Internships
Polar Bear Conservation Research and Educational Outreach
Population Health and Genetics of Black-Footed Cats and Infectious Disease Prevalence in Sympatric Carnivores
Population Management for Caribbean Rock Iguana SSP Recovery Programs
Przewalski’s Horse: Asian Wild Horse Conservation Project
Quokka Project Support
Recovery of the California Condor
Red Panda Network (RPN)
Reteti Elephant Orphanage
Reticulated Giraffe Conservation With Pastoralists
Rock Iguana Breeding Program
Rodrigues Fruit Bat Conservation Support
Sahara Conservation Fund (SCF)
Saiga Conservation Alliance
Snow Leopard Trust (SLT)
The Genetic Diversity of Addax in Reintroduced and Ex-Situ Managed Populations
Translocation Biology of Endangered Heteromyids in Southern California
Turks and Caicos Boa Project
Turks and Caicos Iguana Project
Turtle Survival Alliance (TSA)
Understanding Public Attitudes Towards the Use of Tiger Parts in Southeast Asia
Wildlife Conservation Society (WCS) – Sumatran Tiger Project

Green Practices

ENERGY
Documented Amount Spent
Documented Amount Used
Generated Renewable Energy On-Site
Purchased Renewable Energy

FOOD
Sourced Local Food or Grew it On-Site

FUEL
Documented Amount Spent
Documented Amount Used

GREEN CERTIFICATIONS
One or More Buildings LEED-Certified by the US Green Building Council

GREEN PRACTICES IMPLEMENTED
Alternative Fuel Usage for On-Site Fleet
Alternative Transportation Benefits for Staff
Building Energy Management
Commingled Recycling
Community Solar Program
Composting (On-Site or Off-Site)
Diverted or Recycled Construction Waste
Generated Solar or Wind Energy
Graywater Reuse and/or Rainwater Harvesting
Green Building Policy/Commitment
Green IT
Green Purchasing Policy/Green Procurement
Procured Local Food for On-Site Animals and/or Guest
Smart Building Strategies
Wastewater Reduction
Waterwise Landscaping

PLANS, POLICIES, AND BUDGETS
Dedicated a Line Item in the Budget for Green Practices
Developed or Updated a Sustainability Plan (or Equivalent)
Developed or Updated a Sustainability Plan
SAN FRANCISCO ZOOLOGICAL GARDENS

Education
Adult Volunteer Program
Conservation Lecture Series
Docent Program
Early Childhood – Young Zoologist Series, Little Learners, and Animal Adventures
Earthwatch Field Programs
Paid Tours
Senior Stroll
Wildlife Illustration
Wildlife Theater
Youth Volunteers – Junior Zoologist
Youth Volunteers – Nature Trail
Youth Volunteers – Talk on the Wild Side
Youth Volunteers – Zoo Crew
Youth Volunteers – Zoo Teaching Assistant
Zoo Camp
ZooMobile: Close Encounters and Biodiversity Basics

Field Conservation
Asociación Panameric
AZA Komodo Dragon SSP
AZA SAFE – Vaquita Project
AZA SAFE – Western Pond Turtle Project
AZA SAFE – African Penguin
Charles Darwin Foundation
Earthwatch Institute
Fauna and Flora International (FFI) – François’ Langur
Gorongosa Lion Project
Jane Goodall Institute
Lake Merced Restoration and Conservation
Madagascar Fauna and Flora Group (MFG)
Mountain Lake Restoration/Zoo Crew
Mountain Yellow-Legged Frog Conservation Program
National Network for Ocean Climate Change Interpretation (NNOCCI) – Climate Change Interpretation Trainings
Red Panda Network (RPN)

WASTE
Documented Amount Composted
Documented Amount Recycled
Documented Amount Sent to Landfill

WATER
Documented Amount Spent
Documented Amount Used

Research
Cape Vulture Reintroduction Program in South Africa
Determining the Genetic Basis for Serum Amyloid A Amyloidosis in Island Foxes
Dietary Reconstruction of Jaguar Using Metagenomics and Next-Generation Sequencing
Exploring Conservation Science Field Trips and Teacher Workshops in Conservation Science: African Elephant Reproductive Endocrinology
Investigating the Cause of Fatal Spinal Osteoarthropathy
IUCN SSC Cat Specialist Group Workshop to Develop Jaguar Action Plans for Under-Served Range Countries
IUCN Wild Cattle and Babirusa Conservation and In-Situ Animal Care Skill Development
Jaguar Ecology and Conservation in Peru
Keeping Hirola Healthy: Hirola Antelope Disease Surveillance and Risk Assessment
Nesting Ecology and Human Harvest of the Yellow Spotted River Turtle
Pelecaniformes Morbidity and Mortality Review
Population and Genetic Assessments of Varecia rubra
Preventing the Decline of the Iconic Platypus and Other Key Threatened Australian Freshwater Fish Species
Stop Poisoning Now: Tackling Wildlife Poisoning in Northern Kenya
Tapir Conservation, Anti-Poaching, and Habitat Work
Understanding Illegal Wildlife Trade of Jaguar Parts
Understanding the Impact of Elephant Endotheliotropic Herpesvirus in African Elephants
Wintering Habitat Use Patterns of Tufted Puffins
Reintroduction of Western Pond Turtle to Golden Gate National Recreation Area
San Francisco Forktail Damselfly Project
SANNCOB
Snow Leopard Conservancy (SLC)
Yosemite National Park Conservation Partnership
Yosemite Toad Rearing

Green Practices
ENERGY
Documented Amount Spent
Documented Amount Used
Generated Renewable Energy On-Site

EXTERNAL SUPPORT
Received Support From External Sources for Green Projects

FOOD
Sourced Local Food or Grew it On-Site

FUEL
Documented Amount Spent
Documented Amount Used

GREEN PRACTICES IMPLEMENTED
Alternative Fuel Usage for On-Site Fleet
Alternative Transportation Benefits for Staff
Alternative Transportation Discounts for Guests
Commingled Recycling
Composting (On-Site or Off-Site)
Diverted or Recycled Construction Waste
Generated Solar or Wind Energy
Graywater Reuse and/or Rainwater Harvesting
Green IT
Procured Local Food for On-Site Animals and/or Guest
Waterwise Landscaping

WATER
Documented Amount Spent
Documented Amount Used

Research
Behavioral Assessment of Quality of Life in Aging Zoo Animals
Describing Anticipatory Behavior
Sequoia Kings Canyon Yellow-Legged Frog Headstart Project
Species Identification of Western Pond Turtle SSP Program Animals Through Genetic Analysis
Testing the Effectiveness of Headstarting as Part of a Conservation Toolbox to Restore the Sierra Nevada Yellow-Legged Frogs (Rana sierrae) to the Lake Tahoe Basin

ZooMonitor

SANTA ANA ZOO

Green Practices

ENERGY

DOCUMENTED AMOUNT SPENT

EXTERNAL SUPPORT

FOOD

SOURCED LOCAL FOOD OR GREW IT ON-SITE

FUEL

DOCUMENTED AMOUNT SPENT

GREEN PRACTICES IMPLEMENTED

ALTERNATIVE FUEL USAGE FOR ON-SITE FLEET

ALTERNATIVE TRANSPORTATION BENEFITS FOR STAFF

ALTERNATIVE TRANSPORTATION DISCOUNTS FOR GUESTS

COMMINGLED RECYCLING

COMPOSTING (ON-SITE OR OFF-SITE)

DIVERTED OR RECYCLED CONSTRUCTION WASTE

GENERATED SOLAR OR WIND ENERGY

GRAYWATER REUSE AND/OR RAINWATER HARVESTING

GREEN IT

PROCURED LOCAL FOOD FOR ON-SITE ANIMALS AND/OR GUEST

WATERWISE LANDSCAPING

WASTE

DOCUMENTED AMOUNT COMPOSTED

DOCUMENTED AMOUNT RECYCLED

DOCUMENTED AMOUNT SENT TO LANDFILL
SANTA BARBARA ZOOLOGICAL GARDENS

Education
 Barnyard Feeding
 Condor Kids
 Homeschool Science
 School Science Night Outreach
 Zoo Safaris

Field Conservation
 2nd International Wildlife Reintroduction Conference
 Amphibians of the Los Padres National Forest
 AZA SAFE – African Vulture
 AZA SAFE – Vaquita
 Bitter Creek National Wildlife Refuge
 Black-Footed Ferret Reintroduction
 California Condor Conservation Program
 California Red-Legged Frog Translocation in Santa Monica Mountains
 Channel Islands Fox Conservation Program
 ECO-CELL
 Hornbill Research Foundation (HRF)
 International Elephant Foundation (IEF)
 Local Watershed and Ocean Cleanups
 Marine Sampling
 Naval Base Ventura County Southwest Pond Turtle Monitoring Program
 Oiled Wildlife Care Network (OWCN)
 San Nicolas Island Restoration
 Snow Leopard Trust (SLT)
 Southern Sea Otters in the Santa Barbara Channel
 The Ocean Project
 The Xerces Society – Western Monarch Thanksgiving Count
 Virunga National Park Fallen Rangers Fund
 Western Snowy Plover Rearing Project
 Wildlife Trafficking Alliance

Green Practices
ENERGY
 Documented Amount Spent
 Documented Amount Used
 Generated Renewable Energy On-Site

FOOD
 Sourced Local Food or Grew it On-Site

FUEL
 Documented Amount Spent
 Documented Amount Used

GREEN PRACTICES IMPLEMENTED
 Alternative Transportation Discounts for Guests
 Building Energy Management
 Commingled Recycling
 Community-Based Sustainability Projects
 Composting (On-Site or Off-Site)
 Diverted or Recycled Construction Waste
 Generated Solar or Wind Energy
 Green Purchasing Policy/Green Procurement
 Procured Local Food for On-Site Animals and/or Guest
 Stormwater Management Program
 Water Submetering
 Waterwise Landscaping

PLANS, POLICIES, AND BUDGETS
 Developed or Updated a Sustainability Plan (or Equivalent)
 Developed or Updated a Sustainability Plan

WATER
 Documented Amount Spent
 Documented Amount Used

Research
 Assessment of the Vitamin D and Calcium Physiology in Asian Elephants
SEA LIFE CARLSBAD AQUARIUM AT LEGOLAND

Education
Daily Talks and Feeds
Guest Interaction Staff
School Programs
Shark Identification Sheet
Shark Station
Sustainable Seafood Card

Field Conservation
Beach Cleanups

Green Practices
GREEN PRACTICES IMPLEMENTED
Alternative Transportation Benefits for Staff
Community-Based Sustainability Projects
Composting (On-Site or Off-Site)
Denitrification Systems On Ground
Diverted or Recycled Construction Waste
Procured Local Food for On-Site Animals and/or Guest
Wastewater Reduction
Waterwise Landscaping

Research
Cephalopod Welfare Group
Coccidia Reduction With Copper Wire Treatments for Cownose Stingrays

SEAWORLD SAN DIEGO

Field Conservation
Acoustic Monitoring of Penguins in the Social-Ecological Systems of Tierra del Fuego
Alaska SeaLife Center – Response and Post-Release Monitoring of Stranded Marine Mammals in Alaska
Assessing Health and Population Status of Bottlenose Dolphins Off Southern California
Diets of Walruses in Bristol Bay Alaska
Hubbs-SeaWorld Research Institute
Is She Eating for Two: Validating a Non-Invasive, Early Pregnancy Detection Tool in Fecal Samples of the Endangered Steller Sea Lions (Eumetopias jubatus)

marine Debris Survey at a Sea Turtle Nesting Beach
Ocean Connectors
Project Wildlife
Promoting Wild Wolf Recovery in California & the Southwest
Rising Tide Conservation
SeaWorld San Diego Animal Rescue, Rehabilitation, and Release
Southern California Native Bird Crisis Response, Rescue, and Rehabilitation
The Ecology, Population Dynamics, and Status of Polar Bears (Ursus maritimus) in Relation to Environmental Change
The Hidden Lives of Emperor Penguins: Cameras and Movement Loggers Provide Insight Into Foraging of an Antarctic Icon
Upscaling Coral Larval Culture in the Bahamas for Reef Restoration
Wildlife Rescue and Conservation Association (ARCAS)

SEQUOIA PARK ZOO

Education
Cub Club: Fur, Feathers, & Scales
Cub Club: Growing Up Wild
Junior Zookeepers: If I Ran the Zoo
Junior Zookeepers: ZSI
Junior Zookeepers: ZSI
Nature Exchange
President’s Week Camp
Spring Camp
Stories & Stuffies
Stormwater Pollution Prevention
Thanksgiving Camp
Winter Camp
ZooSnooze

Field Conservation
AZA Chacoan Peccary SSP
Cotton-Topped Tamarin Project
Improving Estimates of Shorebird Abundance on Humboldt Bay
Monitoring Disease Threats for the Reintroduction of the Endangered Iberian Lynx in Extremadura
Green Practices

EXTERNAL SUPPORT
Received Support From External Sources for Green Projects

FUEL
Documented Amount Spent
Documented Amount Used

GREEN PRACTICES IMPLEMENTED
Commingled Recycling
Composting (On-Site or Off-Site)
Graywater Reuse and/or Rainwater Harvesting
Green Building Policy/Commitment
Stormwater Management Program

Research
Assessing the Impact of a Native Landscape Conversion on the Local Bird Community at the Sequoia Park Zoo
Presence of Amdoparvovirus in the Red Panda SSP Population
Red Panda Mucoid Stool Survey
Species Identification of Western Pond Turtle SSP Program Animals Through Genetic Analysis

STEINHART AQUARIUM

Education
3D Theater
Careers in Science Interns
Citizen Science

Curiosity Grove
Distance Learning
Family Programs
Hohfeld Hall
Lectures
Morrison Planetarium
NightLife Programs
Online Education Resources
Out of State and International Student or Youth Field Trips
Portable Planetarium Dome
Public Floor Presentations
Public Programs Volunteer Engagements
Public Programs Volunteer Trainings
Science Action Club
Self-Guided Student Fieldtrips
Teacher Professional Development
Teen Advocates for Science Communication (TASC)
Teen Science Night
The Naturalist Center
The Rock Program Student Fieldtrips
Tidepool

Field Conservation
Aquarium Conservation Partnership (ACP)
AZA Conservation Grants Fund (CGF)
AZA SAFE – African Penguins
AZA SAFE – Atlantic Acropora Corals
Center for Research and Outreach on Amphibian Conservation (CROAC)
Coral Conservation: Florida
IUCN/SSC Conservation Planning Specialist Group (CPSG)
Reef Check California
SExual Coral REproduction (SECORE)
Southern African Foundation for the Conservation of Coastal Birds (SANCCOB)
Turtle Survival Alliance (TSA)
Green Practices

ENERGY
Documented Amount Spent
Documented Amount Used
Generated Renewable Energy On-Site
Purchased Renewable Energy

EXTERNAL SUPPORT
Received Support From External Sources for Green Projects

FOOD
Sourced Local Food or Grew it On-Site

FUEL
Documented Amount Spent
Documented Amount Used

GREEN CERTIFICATIONS
Certified by the Green Restaurant Association
One or More Buildings LEED-Certified by the US Green Building Council

GREEN PRACTICES IMPLEMENTED
Alternative Transportation Benefits for Staff
Alternative Transportation Discounts for Guests
Building Energy Management
Commingled Recycling
Composting (On-Site or Off-Site)
Diverted or Recycled Construction Waste
Energy Submetering
Generated Solar or Wind Energy
Graywater Reuse and/or Rainwater Harvesting
Green Building Policy/Commitment
Green IT
Green Purchasing Policy/Green Procurement
Procured Local Food for On-Site Animals and/or Guest
Purchased Green Power or Renewable Energy Credits (RECs)
Smart Building Strategies
Stormwater Management Program
Wastewater Reduction

Water Submetering
Waterwise Landscaping

PLANS, POLICIES, AND BUDGETS
Dedicated a Line Item in the Budget for Green Practices
Developed or Updated a Sustainability Plan (or Equivalent)
Developed or Updated a Sustainability Plan

WASTE
Documented Amount Composted
Documented Amount Recycled
Documented Amount Sent to Landfill

WATER
Documented Amount Used
Research

Characterization of the Holobiome of Bat Stars (*Asterina miniata*)
Coral Spawning Lab
Disease Processes in Temperate Marine Fishes
Exploring the Least-Known Coral Reefs: Mesophotic Coral Ecosystem, the “Twilight Zone”
Fluorescence and Color Vision in Deep Reef Fishes
Marine Mammal Taxonomic Collections
New Species from Mesophotic Coral Ecosystems
Oversight of Outside Research Requests by Aquarium Research Committee
Reproductive Biology of Seadragons
The Benthic Ctenophore *Lyrocteis imperatoris*
The SubCAS: A Portable, Submersible Decompression Chamber for Mesophotic Coral Reef Fishes

THE LIVING DESERT ZOO AND GARDENS

Education

Living Desert University
Me & You at the Zoo
NAI Certification Programs
School Field Trips
Starry Safari
STEM Programs Scouts & Home School
Teacher/Volunteer and Community Workshops
Zoo Camp
Zoo Teen Volunteer Program

Field Conservation

Action for Cheetahs in Kenya’s Ongoing Research Programs
African Wild Dog Rescue
Black Mamba Anti-Poaching Unit
Bush Babies Environmental Education Program
Capacity Building for Conservation Science in India
Casey’s June Beetle Population Surveys
Celebrating Africa’s Giants: Environmental Education for Conservation of Giraffes, Elephants, and Rhinoceroses
Cheetah Conservation Botswana
Cheetah Conservation Fund (CCF)

Desert Pupfish *Ex-Situ* Refugia Management
Desert Tortoise Adoption Program
Desert Tortoise Conservation Education Program
Mexican Wolf Recovery Program
Mojave River Pond Turtle Conservation Assessment
Native Plant Propagation Project for Restoration in California’s Deserts
Peninsular Pronghorn Recovery Program
Rebuilding the Pride
Reintroducing Endangered Antelopes in the Sahara
Sahara Conservation Fund (SCF)
Save the Vaquita Porpoise
SnapShot Safari at Kenya’s Olare Orok Conservancy
Species Conservation Toolkit Initiative
The Living Desert’s Wildlife Rehabilitation Program
Winter Radio Tracking for Mojave River Western Pond Turtles

Green Practices

ENERGY

Documented Amount Spent
Documented Amount Used
Generated Renewable Energy On-Site

EXTERNAL SUPPORT

Received Support From External Sources for Green Projects

FOOD

Sourced Local Food or Grew it On-Site

FUEL

Documented Amount Spent
Documented Amount Used

GREEN PRACTICES IMPLEMENTED

Energy Submetering
Generated Solar or Wind Energy
Water Submetering
**PLANS, POLICIES, AND BUDGETS**

Dedicated a Line Item in the Budget for Green Practices
Developed or Updated a Sustainability Plan (or Equivalent)
Developed or Updated a Sustainability Plan

**WASTE**

Documented Amount Recycled
Documented Amount Sent to Landfill

**WATER**

Documented Amount Spent
Documented Amount Used

**Research**

Access Closure and Local Species Conservation Study
Black Mamba Anti-Poaching Unit Impact Assessment Study
The Conservation Status of the Southern Western Pond Turtle in the Mojave River in the Mojave Desert

**TURTLE CONSERVANCY**

**Field Conservation**

Aldabra Giant Tortoise Re-Wilding
Bolson Tortoise
Geometric Tortoise Critical Habitat Preservation
Northern Diamondback Terrapin Nesting Project
Philippine Forest Turtle
Ploughshare Tortoise
Radiated Tortoise Confiscation – Madagascar
Trade Interdiction

**Colorado**

**BUTTERFLY PAVILION**

**Field Conservation**

Bees for Elephants
Colorado Butterfly Monitoring Network
Dragonfly Captive Breeding for Conservation
Dragonfly Conservation Program
Firefly Conservation
Parnassian Butterfly Conservation in Mongolia
Pollinator Highway
Senior Habitat Gardening
Urban Prairies Project

**Green Practices**

**ENERGY**

Documented Amount Used

**GREEN CERTIFICATIONS**

Certified as a Wildlife Habitat

**GREEN PRACTICES IMPLEMENTED**

Alternative Transportation Benefits for Staff
Community-Based Sustainability Projects
Composting (On-Site or Off-Site)
Green Building Policy/Commitment
Green Purchasing Policy/Green Procurement
Waterwise Landscaping

**PLANS, POLICIES, AND BUDGETS**

Developed or Updated a Sustainability Plan (or Equivalent)
Developed or Updated a Sustainability Plan

**WASTE**

Documented Amount Composted
Documented Amount Recycled
Documented Amount Sent to Landfill

**WATER**

Documented Amount Used
COLORADO WOLF & WILDLIFE CENTER
Field Conservation
Wildlife Trafficking Alliance

Green Practices
GREEN PRACTICES IMPLEMENTED
Commingled Recycling
Diverted or Recycled Construction Waste
Green Purchasing Policy/Green Procurement
Waterwise Landscaping

PLANS, POLICIES, AND BUDGETS
Developed or Updated a Sustainability Plan (or Equivalent)
Developed or Updated a Sustainability Plan
Specified a Portion of the Amount Saved for Next Year’s Green Practices

Research
PRP/ESWT

DENVER ZOO
Education
Adult Volunteers
Advanced Inquiry Program (AIP)
Animal Academy
ASK Me’s
Assemblies
Awareness Days
Be a Zookeeper Zone
Booths
Bunks
Camps and Mini-Camps
Community Leadership Programs and Service-Learning Programs
Docent Volunteer Training
Explore the Shore
General Meetings
Giraffe Viewing Platform
Guest Assistance Ambassadors
Guide Stations & Exhibit Interpreter – Adult and Teen Led

Cheyenne Mountain Zoo
Field Conservation
African Vulture Conservation
AZA SAFE
Black-Footed Ferret Recovery Program
EWASO Lions
Giraffe Conservation Foundation (GCF)
Mountain Tapir Habitat Ecology in Ecuador
Okapi Conservation Project
Palm Oil Crisis and Orangutan Conservation
Panama Amphibian Rescue and Conservation (PARC)
Pollinator Gardens in Local Schools
Radiated Tortoise Conservation
Saola Working Group
Snow Leopard Trust
Tsavo Trust: African Elephant and Black Rhino Conservation in Kenya
Wyoming Toad Recovery

Research
Giraffe Thermography: Assisted Lameness Management
Giraffe: Blood Gas and Lactate Monitoring During Field Immobilizations of Wild Rothschild’s Giraffe
Giraffe: Comparing Foot Shape and Health in Zoos and in the Wild
Giraffe: Utilizing Banked Plasma to Reduce Giraffe Calf Mortality in United States’ Zoos
Wyoming Toad Vitamin A Level Monitoring With Different Vitamin Supplement

Research
Dragonfly Citizen Science
Grammostola rosea Safety Web for Arthropod Reproduction and Management (SWARM)
Impacts of Coastal Dune Restoration on Insect Communities
Invertebrate Survey of Mongolia’s Ikh Nart Nature Reserve: An Assessment of Biodiversity
Tarantula Growth Study
Guide Volunteer Training
Middle and High School Programs
Mini-Classes
Multi-Contact Outreach Programs
New Volunteer Training
Nurturing Scientists Through Nature Play
Outreach Afterschool and Enrichment
Scout Night
Secret Science Days
Senior Safaris
Shows and Demos (Tier 1 & 2)
Tours
Up-Close Animal Encounters
Urban Advantage Family Science Events
Urban Advantage Field Trips
Urban Advantage Teacher Professional Development
Veterans Tours
Volunteer Scoop Electronic Newsletter
Young Scientists
Zoo Ed-Venture Treks
Zoo Ed-Ventures

Field Conservation
AZA Tiger SSP – Tiger Conservation Campaign
Black-Footed Cat Working Group
Boreal Toad Breeding, Inventory Surveys, and Habitat Restoration
Botswana Prey Survey
Botswana Raptor Project
Botswana Vet Assistance
Botswana Wild Dog Ecology Research
Citizen Science: Pika Monitoring Program in Colorado’s Front Range
Conservation Education and Outreach in Botswana
Denver Zoo Field Conservation Department
Denver Zoo Research Associate
Denver Zoological Foundation Conservation Award
Developing a Model for Local Management of Protected Areas in Mongolia
Ecological Restoration of Arroyos and Head Cuts
Ecology and Conservation of Mongolian Ungulates
Ecology and Social Behavior of Gunnison’s Prairie Dogs
Effects of Bison on Plant and Animal Communities in the Southern Great Plains
Fishing Cat Fund
Flat-Tailed Horned Lizard Biomonitoring Training
General Botswana Conservation Project Support
General Botswana Program Support
General Conservation Program Support at the Rio Mora National Wildlife Refuge
General Mongolia Program Support
General Peru Conservation Program Support
General Rocky Mountain/Great Plains Program Support
General Vietnam Program Support
Graduate Student Fellowships
Great Lakes Piping Plover Recovery Effort – Northern Michigan
Ibex Ecology and Conservation
IdeaWild
Ikh Nart is Our Future Women’s Cooperative in Mongolia
Ikh Nart Nature Reserve Vegetation Map
International Elephant Foundation (IEF)
International Rhino Foundation (IRF)
Kea Conservation Trust
Lake Titicaca Research and Conservation
Malagasy Radiated Tortoise Rescue Emergency
Mariana Avifauna Conservation (MAC) Project
Mongolia Education and Outreach Program
Mongolian Gazelle Conservation
Mongolian Raptors Project
Mongolian Reptile Ecology Research
Nomadic Nature Conservation
Peru Community Engagement
Polar Bears International (PBI)
Restoring the Mora River
Rio Mora Conservation Outreach
Rio Mora Vegetative Restoration
Rocky Mountain Wild
Save Vietnam’s Wildlife
Seafood Watch – Conservation Outreach Partner
Snow Leopard Conservancy
Southern African Foundation for the Conservation of Coastal Birds (SANCCOB)
Springbok of the Kalahari
Tonkin Snub-Nosed Monkey Conservation Education
Tonkin Snub-Nosed Monkey Conservation in Vietnam
Untapped: Women in Conservation
Veterinary Support for Field Conservation Projects in Mongolia
Vietnam Gibbons: Rehab, Return, Conservation, and CET
Wildlife Corridors Programs
Zoos and Aquariums Committing to Conservation (ZACC) – Support

Green Practices

ENERGY
Documented Amount Spent
Documented Amount Used
Purchased Renewable Energy

EXTERNAL SUPPORT
Received Support From External Sources for Green Projects

FOOD
Sourced Local Food or Grew it On-Site

GREEN CERTIFICATIONS
Certified Under ISO 14001

GREEN PRACTICES IMPLEMENTED
Alternative Fuel Usage for On-Site Fleet
Alternative Transportation Benefits for Staff
Alternative Transportation Discounts for Guests
Building Energy Management
Community Supported Agriculture (CSA) Program for Staff
Green IT
Green Purchasing Policy/Green Procurement
Procured Local Food for On-Site Animals and/or Guest
Stormwater Management Program

Used Enterprise (IT) Solutions to Track and Measure Sustainability Performance
Waterwise Landscaping

PLANS, POLICIES, AND BUDGETS
Dedicated a Line Item in the Budget for Green Practices
Developed or Updated a Sustainability Plan (or Equivalent)
Developed or Updated a Sustainability Plan
Specified a Portion of the Amount Saved for Next Year’s Green Practices

WASTE
Documented Amount Composted
Documented Amount Recycled
Documented Amount Sent to Landfill

WATER
Documented Amount Spent
Documented Amount Used

Research
2017-007 Assessing the Efficacy of Improvest® in Female Giraffe
2017-009 Development of a Genome Resource Bank and Transcervical Insemination for the Genetic Management of Tigers
2017-011 Comparing the Physiologic Effects of Two Ultra-Potent Opioid Anesthesia Protocols in Non-Domestic Equids
2017-016 Prevalence, Risk Factors, and Survival of Zoo Animals With Cancer
2017-019 Characterizing the Diversity of Milk Composition Among Mammals
2017-021 Longitudinal Assessment of Gorilla (Gorilla gorilla gorilla) Fecal Microbiome Populations
2018-008 Effects of Socialization on Behavioral, Physiologic, and Reproductive Parameters of Bull Asian Elephants
2018-014 Analysis of Microhabitat Choice and Social Dynamics in Captive California Sea Lions
2018-015 Validation of Immunological Tools in African Buffalo
2018-018 Evolution of Antiviral Factors Among Carnivora Species
2018-020 Comparative Tissue Specific Gene Expression in the Giraffe, Okapi, Cow, Sheep, and Goat
2018-022 Geriatric Elephant Survey
Asian Elephant Female Reproductive Tract Neoplasia Review
Assessment of Fecal Hormone Metabolites for Monitoring Reproductive Activity in Captive Female Aye-Aye (Daubentonia madagascariensis)
Comparison of Circulating Vitamin D (25OHD) in Captive North American and Free-Ranging South African Black Rhinoceroses (Diceros bicornis spp.)
Constraints of Biomass on Innate Immunity Across Terrestrial Mammals
Development of a Database of Fetal Ultrasound Measurements for the Creation of Orangutan-Specific (Pongo spp.) Growth Curves and Determination of Parturition Dates
Drinking Water Quality and Water Husbandry in Association of Zoo and Aquarium (AZA) Zoos
Evaluation of Abnormal Molting in Captive African Penguins (Spheniscus demersus)
Genetic and Endocrine Predictors of Reproductive Success in African Painted Dogs
Investigating Mangshan Pit Viper Habitat Preference and Nocturnal Time Budget for Improved Quality of Life and Future Breeding Success
Investigation Into Potential Nepal Viper (Ovophis monticola) Parthenogenesis
Probable Enalapril Hepatotoxicity in a 15 Year Old Male Western Lowland Gorilla (Gorilla gorilla gorilla)
Red Panda Amdoparvovirus (RpAPV)
Survey of AZA Zoo and Aquarium Participation in Bio-Materials Related Research With External Investigators

LANDRY’S DOWNTOWN AQUARIUM – DENVER
Field Conservation
Birds of Prey Foundation
Fins Attached
Owl’s Nest Rescue and Rehabilitation
Rocky Mountain Raptor Center
SECore (SExual CorAL REproduction)
Wildlife Alliance

PUEBLO ZOO
Field Conservation
AZA SAFE – African Penguin Nest Box Project
Painted Dog Conservation (PDC)
Red Panda Network (RPN)
Southern African Foundation for the Conservation of Coastal Birds (SANCCOB)

Green Practices
ENERGY
Documented Amount Spent
Documented Amount Used
Generated Renewable Energy On-Site

Connecticut

CONNECTICUT’S BEARDSLEY ZOO
Education
Scout Overnights
Field Conservation
AZA Tiger SSP – Tiger Conservation Campaign – Anti-Poaching Activities
Conservation Discovery Corps – Invasive Plant Removal
Eastern Pearl Shell Mussel Population Monitoring
Piping Plover Monitoring
Trout in the Classroom
Turtle Survival Alliance (TSA)

MARITIME AQUARIUM AT NORWALK
Field Conservation
Alewife Monitoring
AZA FrogWatch USA
Barrens Topminnow Conservation
Long Island Sound Biodiversity Project
Osprey Nation
Project Horseshoe
Sand Tiger Shark Conservation
Sea Turtle Conservation
Trout in the Classroom
Green Practices

ENERGY
Documented Amount Spent
Documented Amount Used
Generated Renewable Energy On-Site

EXTERNAL SUPPORT
Received Support From External Sources for Green Projects

FUEL
Documented Amount Spent
Documented Amount Used

GREEN PRACTICES IMPLEMENTED
Alternative Fuel Usage for On-Site Fleet
Building Energy Management
Community-Based Sustainability Projects
Generated Solar or Wind Energy
Procured Local Food for On-Site Animals and/or Guest
Smart Building Strategies
Wastewater Reduction
Waterwise Landscaping

PLANS, POLICIES, AND BUDGETS
Developed or Updated a Sustainability Plan (or Equivalent)
Developed or Updated a Sustainability Plan

WATER
Documented Amount Spent
Documented Amount Used

Research
Aquaculture Gear as Finfish Habitat
Effects of Climate Change Conditions on Animals: Freshwater
Effects of Climate Change Conditions on Animals: Marine
Invasive Species Monitoring
Local Climate Monitoring
Ocean Soundscapes
Phytoplankton Monitoring Network
Protecting Water Quality

MYSTIC AQUARIUM

Education
Autism Night
Birthday Parties
Career & STEM Days
Citizen Science
Classroom Programs
Coastal Field Studies
Conservation Club
Conservation Events
Distance Learning
Family Engagement Events
Internships & Seminars
Outreach Programs
Overnights
School/Youth Group Exhibit Talks & Animal Interactions
Sea School Preschool
STEM Mentoring
Summer Camps
Teacher E-Newsletter
Teacher Workshops/Events
Youth Organization Events

Field Conservation
Amphibian Monitoring
Behavioral Ecology of Piscivores at Gray’s Reef National Marine Sanctuary
Coastal Marine Debris Removal Events
Detection of Influenza A Viruses From Seals Stranded in the Northeastern United States
Ecology of Piscivores at Isla del Coco National Park, Costa Rica
Habitat Restoration of Dodge Paddock and Beal Preserve
Health Assessment of Belugas in the Chukchi Sea and Bristol Bay
Horseshoe Crab Monitoring
Long Island Sound Coastal Field Studies
Rescue and Rehabilitation of Stranded Marine Mammals and Sea Turtles Along the Connecticut and Rhode Island Shorelines
Southern African Foundation for the Conservation of Coastal Birds (SANCCOB) – Assisting With the African Penguin Chick Bolstering Project in South Africa

**Green Practices**

**ENERGY**
Documented Amount Used

**FUEL**
Documented Amount Used

**GREEN PRACTICES IMPLEMENTED**
Alternative Transportation Benefits for Staff
Building Energy Management
Commingled Recycling
Community-Based Sustainability Projects
Green IT
Waterwise Landscaping

**PLANS, POLICIES, AND BUDGETS**
Developed or Updated a Sustainability Plan (or Equivalent)
Developed or Updated a Sustainability Plan

**WATER**
Documented Amount of Wastewater Generated
Documented Amount Spent
Documented Amount Used

**Research**
A Framework for the Selection of Marine Aquarium Fishes to Target for Aquaculture and Sustainable Species Selection
Assay for Illegally Caught Coral Reef Fishes Using Cyanide Poison
Assessing the Role of Marine Protected Areas for Conservation of Biological Diversity and Sustainable Use
Determination of a Suitable Dilution Marker in Blow
Discovering the U.S. Marine Aquarium Industry
Effect of Therapeutic Laser as a Multi-Modal Approach to Treatment of Dermal Abrasions in the Cownose Ray (*Rhinoptera bonasus*)
Etiological Study of Molt Abnormalities in the African Penguin (*Spheniscus demersus*)
Evaluating the Use of Blow for Reproductive Hormone and Genetic Analysis in Belugas (*Delphinapterus leucas*)
Evaluation of Non-Lethal Effects of Nitrogen Gas (N2) Bubbles on Marine Mammal Immune Function and Complement Activation
Further Investigation of Blow or Exhaled Breath Condensate as a Non-Invasive Tool to Monitor the Physiological Response to Stressors in Cetaceans
Investigation of the Marine Mammal Immune System and Impacts of Stress on Health
Investigation of the Molecular Response of Belugas to “Stressors” to Aid in Assessing the Impact of Environmental and Anthropogenic Challenges on Health
Investigation of the Use of Biochemical Markers for Cardiac Disease in Marine Mammals
Measurement of Cortisol in the Blood, Blow, Saliva, and Feces of Beluga Whales
Molecular Biomarkers of Immune System Health in Beluga Blowhole
Research and Development of Aquaculture Techniques for Marine Ornamental Fishes
Sustainable Sourcing of Aquatic Species for Mystic Aquarium

**Delaware**

**BRANDYWINE ZOO**

**Education**
Animal Shows and Informal Interpretation
Family Programs
Special Events
Traveling Zoo
Volunteer Program
Zoo Camp
Zoo School

**Field Conservation**
African Vulture SAFE
American Bird Conservancy
Andean Condor SSP
Delaware Kestrel Project
Delaware Wildlife Rehabilitators Association
Florida

BREVARD ZOO

Field Conservation

African Bats NPC
AZA FrogWatch USA
AZA SAFE - Sea Turtles
Borneo Nature Foundation
Brevard Zoo’s Sea Turtle Healing Center
Dominica Sperm Whale Project
Endangered Wildlife Trust
Florida Keys Wildlife Society
Florida Scrub Jay Translocations and Monitoring
Game Rangers International
GLOBE Citizen Science
Grevy’s Zebra Trust
IUCN SSC Small Mammal Specialist Group (SMSG)
Landscape and Conservation Mentors Organization (LCMO)
Madagascar Wildlife Conservation
Marine Megafauna Foundation
Pan African Sanctuary Alliance (PASA)
Peace for Conservation
Perdido Key Beach Mouse Breeding Program
Restore Our Shores
Saola Working Group
Save the Frogs!
Save the Giants
Turtle Survival Alliance
VulPro
Whales of Guerrero/Oceanic Society
Wildtracks

Green Practices

ENERGY
Documented Amount Spent
Documented Amount Used

GREEN CERTIFICATIONS
Certified as a Wildlife Habitat

GREEN PRACTICES IMPLEMENTED
Building Energy Management
Commingled Recycling
Green Purchasing Policy/Green Procurement
Waterwise Landscaping

Research
American Kestrel Monitoring Project
AZA Contraceptive Management Center
Developing Genomic Tools for North American River Otter
Does Oxidative Stress Differ Between Mammals and Birds?
General Research Specimen Collection for Delaware Museum of Natural History
Red Panda Fecal Survey of Amdoparvovirus
Survey of AZA Zoo and Aquarium Participation in Bio-Materials Related Research With External Investigators
The Sweet Smell of Poop: Using Chromatography and Mass Spectrometry to Identify Species From Their Feces
Urban Wildlife Monitoring Projects

Green Practices

ENERGY
Documented Amount Spent
Documented Amount Used
Generated Renewable Energy On-Site
EXTERNAL SUPPORT
Received Support From External Sources for Green Projects

FOOD
Sourced Local Food or Grew it On-Site

GREEN PRACTICES IMPLEMENTED
Alternative Transportation Discounts for Guests
Building Energy Management
Commingled Recycling
Community-Based Sustainability Projects
Composting (On-Site or Off-Site)
Generated Solar or Wind Energy
Graywater Reuse and/or Rainwater Harvesting
Green IT
Procured Local Food for On-Site Animals and/or Guest
Smart Building Strategies
Stormwater Management Program

PLANS, POLICIES, AND BUDGETS
Dedicated a Line Item in the Budget for Green Practices

WATER
Documented Amount of Wastewater Generated
Documented Amount Spent
Documented Amount Used

Research
Behavioral Monitoring of Resident Animals at Brevard Zoo
The Paddle-Box Task
The Primate Gambling Task

BUSCH GARDENS TAMPA BAY
Field Conservation
Assessing the Threats to Painted Dogs in the Mid Zambezi Valley
Cheetah Conservation Fund: Cheetah Reintroduction and Data Collection
Cheetah Outreach Trust-Livestock Guarding Dogs
Community-Driven Conservation of Kibale National Park, Uganda
Conservation Education in Bohorok, North Sumatra
Conservation of Lions in Murchison Falls and Kidepo Valley National Parks
Emerging Wildlife Conservation Leaders
Evaluating the Reintroduction Success of Bornean Orangutans
Ewaso Lions
Grauer’s Gorilla Conservation in the Eastern Democratic Republic of the Congo
Gunung Palung Orangutan Conservation Program (GPOCP) – Creating a Network of Informants to Fight Wildlife Crime in West Kalimantan
Imbewu Youth Wilderness Experiential Trails
International Rhino Foundation (IRF) – Black Rhino Conservation and Anti-Poaching, Zimbabwe
Maasai Giraffe Project
Mabula Ground Hornbill Project (MGHP)
Pantanal Giant Armadillo Project
Poisoning of Wildlife – Urgent Ranger Training Intervention Required
Primate Care Training Program
Protection of Grauer’s Gorillas in Congo From Bushmeat Hunting
Providing Solutions for Human – Snake Conflicts and Protecting Threatened King Cobra Populations in the Eastern Ghats of India
Reducing Marine Debris, Increasing Environmental Stewardship
Reducing Threats to Wildlife in Malawi’s Critical Habitats – Sustainable Livelihoods through Beekeeping Training
Rehabilitating Wildlife Poachers Into Alternative Professions
Ruaha Carnivore Project (RCP) – Building Capacity to Monitor Carnivores and Reduce Conflict in the Ruaha Landscape of Tanzania
Satellite Collars for Cheetah Re-Wilding and Data Collection
Saving Sumatran Tigers: Bukit Tigapuluh National Park Survey
Sowing the Seeds of Conservation: Kasese Wildlife Conservation Awareness Organization’s Queen Elizabeth National Park Field Trip Project
Sumatran Orangutan Reintroduction at Jantho Nature Reserve, Indonesia
Supporting Recovery of the Asian Elephant Population in Prey Lang Forest, Cambodia
Green Practices

ENERGY
Documented Amount Spent
Documented Amount Used
Generated Renewable Energy On-Site

GREEN PRACTICES IMPLEMENTED
Commingled Recycling
Diverted or Recycled Construction Waste
Generated Solar or Wind Energy
Graywater Reuse and/or Rainwater Harvesting

WASTE
Documented Amount Recycled
Documented Amount Sent to Landfill

WATER
Documented Amount Spent
Documented Amount Used

Research
An Investigation Into Melanism in the Captive Amur Leopard (Panthera pardus orientalis) Population
Reintroductions and Translocations
Serval Reproductive Physiology

DISCOVERY COVE
Field Conservation
Rising Tide Conservation

DISNEY’S ANIMAL KINGDOM
Education
A Path Less Traveled – Disney’s Animal Kingdom 20th Anniversary
Backstage Safari
Backstage Tales
Behind the Seeds Tour
Behind-The-Scenes at Disney’s Animal Kingdom Complimentary Tours
Caring for Giants
Community Hospital Program

CENTRAL FLORIDA ZOO & BOTANICAL GARDENS
Education
Animal Encounters
Bat House Building Workshop
Central Florida Zoo After Dark – Nighttime Safaris
Community Outreaches
Cub Scout and Boy Scout Programs
Curriculum Programs
Florida Black Bear Awareness Program
Girl Scout Programs
Guided Tours
Homeschool Family Workshops
Homeschool ZOOventure Classes
Keeper for a Day and Family Zoo Keeper Experience
Night Hike
Preschool Programs
Storytime
Summer Camps
Wild Art & Wine
Zoo to You Programs

Field Conservation
Central Florida Zoo’s Orianne Center for Indigo Conservation
Cheetah Conservation Fund (CCF)
Claxton Rattlesnake and Wildlife Festival
International Rhino Foundation (IRF)
Proyecto Titi
Conservation Day Camp – Summer
DAK Youth Education Series (YES) Programs
DAKL Onstage Guest Activities
Dine With an Animal Specialist
Earth Day at Disneyland Resort
Earth Day at Disney’s Animal Kingdom
Elephants and Bees: Reducing Human-Elephant Conflict in Kenya
Epcot Flower and Garden Festival Themed Weekends
Gorilla Rehabilitation & Conservation Education Center (GRACE)
Meet a Sea Turtle Specialist at Disney’s Vero Beach Resort
Proyecto Tití: Conservation of the Cotton-Top Tamarin in Colombia
Purple Martin Palooza
Sea Turtle Night Walks
Sense of Africa
Starlight Safari
Tour de Turtles
Up Close With Rhinos
Wanyama Safari
Wild Africa Trek and Savor the Savanna
Wilderness Explorers

Field Conservation
Anteaters and Highways
Archie Carr National Wildlife Refuge – Education Program
Assessing Threats in the Mid-Zambezi
Association of Zoological Horticulture (AZH) – Plant Conservation Grant Program
Audubon Canyon Ranch – Mountain Lion Project
AZA Guam Rail SSP – Pre-Release Quarantine Program
AZA SAFE – Saving Animals From Extinction
Backyard Bat Survey
Backyard Conservation of Tasman Parakeets
Black Lion Tamarin Conservation in a Fragmented Landscape
Blue Iguana Recovery Achieves Sustainability
Bring Back the King
Bring Back the Pollinators Campaign
Building Communities That Conserve Wetlands
Butterfly Conservation in Greater Yellowstone
California Condor Nest Guarding Program
Collaborative Conservation of Endangered Vertebrates
Community Based Vulture Conservation
Community Conservation for Spectacled Bears
Community Education for Carnivore Conservation
Community Field Conservation Training Initiative
Community Forest Restoration and Conservation in the United States
Community Support for Okapi Conservation
Community-Based Conservation of River Turtles
Connect to Protect – Reverse the Decline of Butterflies
Connect to Protect – Reverse the Decline of Cranes
Connect to Protect – Reverse the Decline of Elephants
Connect to Protect – Reverse the Decline of Great Apes
Connect to Protect – Reverse the Decline of Monkeys (Cotton-Top Tamarins)
Connect to Protect – Reverse the Decline of Monkeys (Golden Lion Tamarins)
Connect to Protect – Reverse the Decline of Rhinos
Connect to Protect – Reverse the Decline of Tigers
Connecting Songbird Conservation Across Hemispheres
Conservation Hero Award: Cheetah Conservation Botswana
Conservation Hero Award: Gorilla Rehabilitation and Conservation Education (GRACE) Center
Conservation Hero Award: Heracleo “Laqui” Duarte Lopez
Conservation Hero Award: Ibnu Andrian
Conservation Hero Award: Kris Inman
Conservation Hero Award: Maria Njamba
Conservation Hero Award: Neovitus Sianga
Conservation Hero Award: Pablo Bordino
Conservation Hero Award: Serge Jacob Meye and the MINOF Ecogardes Patrol Team
Conservation Hero Award: Sumadi Hasmaran
Conservation Hero Award: Tashi Ghale
Conservation Hero Award: Tasrif Kartawijaya
Conservation Hero Award: Tri Kurnia
Conservation of Fijian Iguanas
Conservation of Sumatran Elephants
Conservation Planning Specialist Group (CPSG) Support
Conserving Breeding Shearwaters in Oahu
Conserving India’s Lion-Tailed Macaques
Conserving Jaguars in Southern Belize
Conserving Jamaica’s Rock Iguana
Conserving Rhinos Through Community Engagement
Conserving Southwest Florida's Coastal Wildlife Corridor
Conserving the Cao Vit Gibbon
Conserving the Pygmy Sloth
Conserving Vultures Through Community Ambassadors
CRAYARC
Creating Conservation Champions, Madagascar
Dian Fossey Gorilla Fund International – Support and Board Member
Disney Conservation Focused Labor
Disney’s Wildlife Monitoring Program
Drone Monitoring of Grevy’s Zebra Habitat
Eastern Caribbean Offshore Islands Network
Empowering Communities to Conserve Large Carnivores
Endangered Hawaiian Yellow-Faced Bee Conservation
Engaging Herders in Vulture Conservation
Enhancing Human-Elephant Coexistence in Ruaha-Rungwa
Ensuring Right of Passage
Expanding Critical Habitat Conservation: Vietnam
Full Lifecycle Conservation – Semipalmated Sandpiper
Future Farmers of Africa
Gopher Tortoise Conservation Program
Gorilla Rehabilitation and Conservation Education (GRACE) Center
Grassroots Conservation of Rare Turtles in Metro-Boston
Grauer’s Gorilla Conservation Through Education
Guatemalan Endangered Reptile Awareness Program
Hahamongna to Tujunga Wildlife Corridor
Indian Turtle Conservation Program
Innovative Community-Based Predator Protection Program
Saving African Lions
Integrated Gorilla and Human Health
International Emergency Relief Network and Response Fund
International Iguana Foundation (IIF) – Support and Board Member
IUCN/SSC Conservation Planning Specialist Group (CPSG)
Jane Goodall Institute – Roots and Shoots Global
Javan Loris Community Conservation Project
Jay Watch: Citizen Science Program
Jersey Shore Terrapin Conservation Project
Kibale Forest Schools Conservation Project
Kiwikiu Habitat Restoration and Re-introduction
Landscape Level Bird Habitat Conservation
Least Tern and Shorebird Conservation
Long-Term Monitoring Program and Experimental Training for Students (LIMPETS) Program
Lowland Tapir Conservation Initiative – Pantanal Tapir Program
Mabula Ground Hornbill Project (MGHP)
Mariana Avifauna Conservation (MAC) Project
National Wildlife Federation (NWF) – Kids and Families Outreach – Be Out There
Northern Jaguar Project – Viviendo con Felinos
Northern Tanzania Big Cats Conservation Initiative
Of Bats and Men
Okapi Conservation Project (WCGI)
Orangutan Protection Through Community Development
Orangutan Research, Education, and Conservation
Pacific Island Avifauna Health Assessment
Pantanalan Giant Armadillo Project
Penguins, People, and the Planet
Pickersgill’s Reed Frog: Wetland Custodian
Primate Conservation Project Peninsular Malaysia
Project Safe Flight Atlanta
Project Wildcat
Promoting Coexistence to Safeguard Wildlife
Protecting Mongolia’s Endangered Snow Leopard
Purple Martin Migration and Nesting Research
Rare Plant Restoration and Research
Restoring the Pygmy Hog
Rewilding Australia With Tasmanian Devils
Rhino Management in Zimbabwe’s Lowveld
Sandhill Habitat Restoration
Sarus Cranes, Wetlands, and Dipterocarp Forest
Save the Elephants - Elephants and Bees
Saving Maine’s Migratory Seabirds
Saving the Critically Endangered Hirola
Saving the Ploughshares From Extinction
Saving the World’s Rarest Duck
Saving Wildlife: African Apes
Saving Wildlife: Conservation and Recovery of At-Risk Butterflies
Saving Wildlife: Developing a Strategy to Reverse the Decline of the Critically Endangered Sumatran Rhinoceros
Saving Wildlife: Monkeys (Expanding Outreach for Proyecto Titi)
Saving Wildlife: Monkeys (Golden Lion Tamarin Integrated Conservation)
Saving Wildlife: Recovery Program for Siberian Cranes
Saving Wildlife: Reversing the Decline of the Critically Endangered Sumatran Tiger
Saving Wildlife: Saving Africa’s Elephants
Smorgasbords in the Agroforestry Canopy
Taking Root and Spreading Wings
Tasmania Island Ark Bushrangers
Thames European Eel Conservation Project
Towards Black-Capped Petrel Conservation
Transforming Indonesia’s Forest Management Paradigm
Turtle Survival Alliance (TSA)
Umbrella Bird Conservation in the Chocó, Colombia
Urban Oasis for Migrating Songbirds
Vocal Culture of Hawaiian Crow
Wildlife Rehabilitation Center of Central Florida Support

Green Practices

ENERGY
Documented Amount Spent
Documented Amount Used
Generated Renewable Energy On-Site
Purchased Renewable Energy

FOOD
Sourced Local Food or Grew it On-Site

FUEL
Documented Amount Spent
Documented Amount Used

GREEN PRACTICES IMPLEMENTED
Alternative Fuel Usage for On-Site Fleet
Alternative Transportation Benefits for Staff
Building Energy Management
Commingled Recycling
Community-Based Sustainability Projects
Completed Greenhouse Gas Inventory
Composting (On-Site or Off-Site)
Diverted or Recycled Construction Waste
Energy Submetering
Generated Energy through Anaerobic Digester
Generated Solar or Wind Energy
Graywater Reuse and/or Rainwater Harvesting
Green Purchasing Policy/Green Procurement
Procured Local Food for On-Site Animals and/or Guest
Purchased Carbon Offset(s) for On-Site Utility Use
Purchased Green Power or Renewable Energy Credits (RECs)
Smart Building Strategies
Stormwater Management Program
Used Enterprise (IT) Solutions to Track and Measure Sustainability Performance
Used Environmental Management System
Waterwise Landscaping

GREENHOUSE GAS EMISSIONS
Documented Amount of Greenhouse Gas Emissions

PLANS, POLICIES, AND BUDGETS
Dedicated a Line Item in the Budget for Green Practices
Developed or Updated a Sustainability Plan (or Equivalent)
Developed or Updated a Sustainability Plan
Specified a Portion of the Amount Saved for Next Year’s Green Practices
In-House Monitoring of Steroid Hormone Metabolites in Urine Informs Breeding Management of a Giant Anteater (*Myrmechophaga tridactyla*)

Investigating Decision-Making and Perception in Box Turtles

Investigation of Parental Investment and Genetic Relatedness of Carmine Bee-Eaters

Latitudinal Comparisons of Nesting and Migratory Ecology of a Long-Distance Migrant – the Purple Martin

Management of Iron Overload in the Black Rhinoceros (*Diceros bicornis*) Using an Oral Iron Chelator

Method and Assay Validation for Ambassador Animals Study

Monitoring and Controlling Ovarian Function in the Rhinoceros

Ovarian Cycle and Pregnancy Monitoring of the Common Hippopotamus (*Hippopotamus amphibius*) Through Salivary Analyses and Trans-Abdominal Ultrasound

Pilot Study: a Test of GonaCon™ Gonadotropin-Releasing Hormone (GnRH) Vaccine as an Effective Contraception Method in Zoo-Managed Hippopotamus

Preliminary Feeding Trial of Atala Caterpillars (*Eumaeus atala*) on Standard Caterpillar Medium

Prevalence and Methodology for Detection of *Rhabdias* spp. in Dart Frogs Including Risk Factors for Disease

Reintroduction of the Mandrill: Stress Hormone Study

Serum Osmolality in Captive African Elephants (*Loxodonta africana*)

Ultrasound Characteristics and Hormone Values in Red Wolves (*Canis rufus*) With and Without Reproductive Disease

Use of GNRH Agonists as Contraceptives in Male Lion Tailed Macaques (*Macaca silenus*)

Use of Radio-Frequency Identification (RFID) Technology to Study the Reproductive Biology of an Ex-Situ Colony of Northern Carmine Bee-Eaters (*Merops nubicus*)

Validating the Measurement of Oxytocin in Western Lowland Gorilla (*Gorilla gorilla gorilla*) Urine and Saliva Using a Commercially Available Enzyme Immunoassay

Work-for-Food Enrichment Program Increases Exploration and Decreases Stereotypies in Four Species of Bears
JACKSONVILLE ZOO AND GARDENS

Field Conservation
Archbold – Crotalaria avonensis
Archbold – Hartwrightis floridana
Australian Rainforest Trust
Avian Research and Conservation Institute (ARCI) – Swallow-Tailed Kite Project
AZA Komodo Dragon SSP
AZA SAFE
Belize Foundation for Research and Environmental Education (BFREE)
Bok Tower Gardens – Clasping Warea
Bonobo and Congo Biodiversity Initiative (BCBI)
Chapman’s Fringed Orchid
Cheetah Conservation Botswana
Giant Armadillo Project
Giraffe Conservation Foundation (GCF)
Gorilla Rehabilitation and Conservation Education (GRACE) Center
Grevy’s Zebra Trust
Gulf Coast Waterdog Breeding Program
Indonesia Initiative
Institute for Regional Conservation
International Rhino Foundation (IRF)
Lowland Tapir Conservation Initiative
Madagascar Fauna and Flora Group (MFG)
Marine Mammal Rescue Program
Migratory Whooping Crane Temporary Winter Holding Refurbishment
Okapi Conservation Project
Pine Flatwood Restoration
Rupununi Region Jaguar Project
Turtle Survival Alliance (TSA) – Turtle Survival Center
VulPro
Zoo Conservation Outreach Group (ZCOG) – Scholarship Program

LEMUR CONSERVATION FOUNDATION

Education
Ako Conservation Education Program
Open House
Field Conservation
Field Training Programs for Malagasy Conservationists
Lemur Conservation and Community Development in Northeastern Madagascar
Madagascar Fauna and Flora Group (MFG)

Green Practices

ENERGY
Documented Amount Spent
Documented Amount Used

FOOD
Sourced Local Food or Grew it On-Site

FUEL
Documented Amount Spent

GREEN CERTIFICATIONS
Certified as a Wildlife Habitat

GREEN PRACTICES IMPLEMENTED
Commingled Recycling
Composting (On-Site or Off-Site)
Procured Local Food for On-Site Animals and/or Guest

PLANS, POLICIES, AND BUDGETS
Developed or Updated a Sustainability Plan

Research
Agonistic Grooming in Lemurs
Carnivore Camera Trapping in Anjanaharibe-Sud Special Reserve, Madagascar
Eastern Kentucky University Field School
Ontogeny of Lemur Chewing System
Silky Sifaka and Ruffed Lemur Survey in the Unprotected Maherivaratra Forest, Madagascar
The Effects of Range Size on Intestinal Parasite Richness and Intensity in Lemur Species
LION COUNTRY SAFARI

**Education**

An Animal Tale  
Animal Adaptations I  
Animal Adaptations II  
Animal Senses  
Animal Theater Shows  
Backyard Florida General Scout Program  
Bear: Critter Care  
Bear: Fur, Feathers, and Ferns  
Boy Scout Bird Study  
Boy Scout Mammal Study  
Brownie – Bugs  
Brownie – Pets  
Brownie – Senses  
Brownie: Outdoor Adventurer  
Brownies: Outdoor Art Explorer  
Cadette – Animal Helpers  
Cadette: Naturalist-Trees  
Careers in Zoos  
Classification I  
Classification II  
Conservation  
Daisy – Three Cheers for Animals  
Daisy: Between Earth and Sky  
Dinosaurs  
Ecology  
Enrichment  
Exhibit Talks  
Fall Toddler Programs  
Food Chain  
Fur, Feathers, and Scales  
Girl Scout General Program: Animal Helpers  
Habitats I  
Habitats II  
Habitats III  
Junior – Animal Habitats  
Junior – Detectives  
Junior: Naturalist – Flowers  
LCSI Animal Mystery  
Off-Property Community Events  
Outreach Presentations  
Party for the Planet  
Premium Guest Experiences  
Preserve Tour Materials  
Rock On! Geology  
Safari Day Camp  
Safari Queen Boat Tour  
Senior – Voice for Animals  
Species Appreciation Days  
Spooky Safari Halloween  
Tigers: Tigers in the Wild  
Virtual Field Trips  
Webelos: Earth Rocks  
Webelos: Into the Wild  
Webelos: Into the Woods  
Wolf: Digging in the Past  
Wolf: Paws on the Path  
World Oceans Day

**Field Conservation**

American Association of Zoo Keepers – LCS Chapter  
AZA SAFE – Eastern Indigo Snakes  
AZA SAFE – Giraffe  
AZA’s Conservation Grants Fund (CGF)  
Conservation Centers for Species Survival (C2S2)  
Conservation Staff Salary  
Giraffe Conservation Foundation (GCF) – Giraffe Painting/Experience  
Grevy’s Zebra Trust  
International Rhino Foundation (IRF)  
Jane Goodall Institute  
Lion Guardians  
Lubee Bat Conservancy  
Pan African Sanctuary Alliance (PASA)  
Sloth Conservation Foundation  
Source Population Alliance (SPA)
Turtle Survival Alliance
Wetlands Preservation/Restoration
World Parrot Trust

**Green Practices**
**GREEN PRACTICES IMPLEMENTED**
Commingled Recycling

**Research**
A Survey of the Prevalence and Perceived Efficacy of Biofloors in Great Ape Exhibits Within AZA Zoos
Allostatic Load in Chimpanzees as an Index of Welfare
Blackbuck Microchip Loss
Guest Retention of Conservation Messaging
Hepatic Neoplasia and Cirrhosis in Nile lechwe
Lion Behavioral Monitoring (*Panthera leo*)
Research Internship
Species and Sex Genetic Testing of Two-Toed Sloths

**LUBEE BAT CONSERVANCY**

**Education**
Annual Florida Bat Festival
General Lubee Bat Conservancy Educational Programming

**Field Conservation**
Mauritius Fruit Bat Cull
Rodrigues Environmental Education Project
Saving the Ontong Java Flying Fox (*Pteropus howensis*) of a Vanishing Pacific Atoll

**Green Practices**
**ENERGY**
Documented Amount Spent

**PLANS, POLICIES, AND BUDGETS**
Developed or Updated a Sustainability Plan (or Equivalent)

**WASTE**
Documented Amount Recycled

**MOTE MARINE LABORATORY & AQUARIUM**

**Field Conservation**
Coral Reef Restoration, Monitoring, and Assessment Programs
Fisheries Habitat Ecology & Acoustics Program
Manatee Research Program
Mote Animal Hospitals
Sea Turtle Conservation, Research Program, and Sea Turtle Patrol
Sharks & Rays Conservation Research Program
Stranding Investigations Program

**Research**
Benthic Ecology
Chemical and Physical Ecology Program
Coral Health and Disease Program
Ecotoxicology Program
Environmental Laboratory for Forensics
Fisheries Ecology and Enhancement Program
Marine and Freshwater Aquaculture Research Program
Marine Immunology Program
Ocean Acidification Program
Sensory Research With Two Resident Manatees

**LUBEE BAT CONSERVANCY**

**Education**
Annual Florida Bat Festival
General Lubee Bat Conservancy Educational Programming

**Field Conservation**
Mauritius Fruit Bat Cull
Rodrigues Environmental Education Project
Saving the Ontong Java Flying Fox (*Pteropus howensis*) of a Vanishing Pacific Atoll

**Green Practices**
**ENERGY**
Documented Amount Spent

**PLANS, POLICIES, AND BUDGETS**
Developed or Updated a Sustainability Plan (or Equivalent)

**WASTE**
Documented Amount Recycled

**NAPLES ZOO**

**Education**
Camp WILD
Field Trip Experiences
Keeper Talks
Primate Expedition Cruise
Safari Canyon Shows
Safari Squad/Toddler Programs
Wild Encounters
Zoo Yoga
ZooCon Distance Learning Programs
ZooMobile Outreach Programs
Field Conservation
African People and Wildlife Fund
AZA Conservation Grants Fund (CGF)
AZA SAFE – African Penguin
AZA SAFE – Founders Circle
AZA Tiger SSP – Tiger Conservation Campaign
Black Bear: Smarter Than the Average Bear Secure Trash Campaign
Burmese Python Monitoring and Eradication Testing
Conservation Staff Labor
Florida Bonneted Bat Monitoring and Rehab
Florida Panther Species Recovery – Outcome-Oriented Education
Florida Panther Species Recovery – Rehabilitation Facility
Florida Panther: Testing the Potential of Rarámuri Criollo Cattle to Protect U.S. Herds and Endangered Panthers
Fruit Bats, Habitat Restoration, and Natural Forest Sustainable Management in Eastern Madagascar
Giant Armadillo Project
Giraffe Conservation Foundation (GCF)
Hyacinth Macaw Project (Projeto Arara Azul)
Madagascar Fauna and Flora Group (MFG)
Orchid Conservation in South Florida and Cuba
Palm Oil Advocacy
Panthera – Leopards
Ruaha Carnivore Project (RCP) – Support Through African Wildlife Foundation
Seafood Watch
Tarangire Elephant Project
Tree Planting
Turtle Survival Alliance – Radiated Tortoise Rescue
Wildlife Trafficking Alliance
Zoo Conservation Outreach Group (ZCOG)
Zoo Conservation Outreach Group (ZCOG) – Anteaters and Highways

Research
Florida Bonneted Bat Research

NATURAL ENCOUNTERS, INC.
Field Conservation
The Peregrine Fund
World Parrot Trust (WPT)

Green Practices

ENERGY
Documented Amount Used

GREEN PRACTICES IMPLEMENTED
Commingled Recycling
Composting (On-Site or Off-Site)
Generated Energy through Anaerobic Digester
Procured Local Food for On-Site Animals and/or Guest
Waterwise Landscaping

PLANS, POLICIES, AND BUDGETS
Developed or Updated a Sustainability Plan (or Equivalent)
Developed or Updated a Sustainability Plan

WASTE
Documented Amount Composted

PALM BEACH ZOO

Education
Afterschool Series
Conservation Leadership Lectures
Guided Tours
Keeper Talks
Night Owls Overnight Adventure
STEM Teacher Open House
Toddler Workshops
Zoo Camp
Zoo Classes
Zoo Interpreters Training
Zoo Labs
Zoo School

Green Practices
GREEN PRACTICES IMPLEMENTED
Commingled Recycling
Generated Solar or Wind Energy
Field Conservation
Florida Wildlife Corridor Project
Panamanian Jaguar Research Through APPC
Perdido Key Captive Breeding and Reintroduction
Turtle Survival Alliance
Wildlife Conservation Society (WCS) – Greater Madidi Tambopata Landscape Project
Wildlife Conservation Society (WCS) – Malaysia Field Project
Zoological Society of London (ZSL) – Evolutionarily Distinct and Globally Endangered (EDGE) Fellowship

Green Practices
ENERGY
Documented Amount Spent
Generated Renewable Energy On-Site

EXTERNAL SUPPORT
Received Support From External Sources for Green Projects

FUEL
Documented Amount Spent

GREEN CERTIFICATIONS
One or More Buildings LEED-Certified by the US Green Building Council

GREEN PRACTICES IMPLEMENTED
Alternative Transportation Benefits for Staff
Alternative Transportation Discounts for Guests
Carbon Offsets for Employee Travel
Community Solar Program
Community Supported Agriculture (CSA) Program for Staff
Composting (On-Site or Off-Site)
Diverted or Recycled Construction Waste
Energy Submetering
Generated Solar or Wind Energy
Green Purchasing Policy/Green Procurement
Procured Local Food for On-Site Animals and/or Guest
Purchased Carbon Offset(s) for On-Site Utility Use
Purchased Green Power or Renewable Energy Credits (RECs)
Smart Building Strategies
Water Submetering

PLANS, POLICIES, AND BUDGETS
Developed or Updated a Sustainability Plan (or Equivalent)

WATER
Documented Amount Spent

Research
Chordoma Prevalence in Perdido Key Beach Mice

SANTA FE COLLEGE TEACHING ZOO
Education
Animal Encounters
AZA FrogWatch USA
Birthday Party
Boo at the Zoo
College for Kids
Community Outreach Program
Education Carts
Keeper Talks
Party for the Planet
Rotary Reading Safari
Special Event Outreach
Training Demonstrations
Tree Kangaroo Awareness Day
VIP Tour
Zoo Guided Tours
Zookeeper Day
Zookeeper for a Day

Field Conservation
Alachua Conservation Trust (ACT) – North Florida Wetlands Conservation Project (NFWCP)
Ashton Biological Preserve
Earthwatch’s Trinidad Ocelot Project
Gopher Tortoise Rehabilitation and Release Program
IUCN-SSC Crocodile Specialist Group (CSG)
Tree Kangaroo Conservation Program
Turtle Survival Alliance (TSA)
Green Practices

FOOD
Sourced Local Food or Grew it On-Site

GREEN PRACTICES IMPLEMENTED
Community-Based Sustainability Projects
Diverted or Recycled Construction Waste
Generated Solar or Wind Energy
Green IT
Green Purchasing Policy/Green Procurement
Procured Local Food for On-Site Animals and/or Guest
Waterwise Landscaping

SEA LIFE ORLANDO AQUARIUM

Field Conservation
Coastal Cleanups
Shingle Creek Canoe Cleanups
Stormwater Pollution Prevention
Tour de Turtles

Green Practices

GREEN PRACTICES IMPLEMENTED
Alternative Transportation Discounts for Guests
Building Energy Management
Commingled Recycling
Community-Based Sustainability Projects
Green IT
Green Purchasing Policy/Green Procurement
Smart Building Strategies

PLANS, POLICIES, AND BUDGETS
Developed or Updated a Sustainability Plan (or Equivalent)

Research
Investigating Stingray Reproductive Disease

SEAWORLD ORLANDO

Field Conservation
Audubon Center for Birds of Prey - Bald Eagle Rescue and Rehabilitation
Bioengineering Plastic-Degrading Microbes To Eliminate Plastic Waste
Causal Agents of Reproductive Disease in Wild and Captive Female Southern Stingrays
Conserving Coastal Sharks and Rays Through Health Research
Locating the Birthing Grounds of the Migratory Bonnethead Shark
Mapping Wood Duck Migration Routes in the Northeast, U.S.A.
Marsh Restoration-Replenishing Natural System Water Through Willow Removal
Molecular Biomarkers of Immune System and Health in Beluga Blowhole
Monitoring the Health and Distribution of Dolphin Communities Along the East Coast of Central Florida: A Region of Increased Dolphin Entanglements and Repeated Unusual Mortality Events
National Audubon Society - Conservation of Maine Coast Alcids
National Fish and Wildlife Foundation - Killer Whale Research and Conservation Program
National Ocean Sciences Bowl
Norwegian Orca Survey: Ecological Variations in Norwegian Killer Whales
Panamerican Conservation Association (APPC): Sloth and Anteater Rescue, Rehabilitation, and Education Program in the Republic of Panama
Reproductive Research to Support Captive Sustainability of Sand Tiger Sharks, Carcharias taurus
Rising Tide Support for Culture of Hawaiian Reef Species
SeaWorld Orlando – Animal Rescue and Rehabilitation Program
Southern African Foundation for the Conservation of Coastal Birds (SANCCOB) – Conservation of Endangered African Penguins
Tackling Turtle Trade: Developing Capacity to Combat Sea Turtle Poaching in Southeast Asia via the Use of Unmanned Aerial Vehicles
TAMAR Kids: Reconnecting Sea, Sea Turtles, and Local Culture
Wild Earth Allies (Flora and Fauna): Critically Endangered Hawksbill Turtle Conservation in Central America
ST. AUGUSTINE ALLIGATOR FARM

Field Conservation
Ark Wildlife Rescue and Rehabilitation
Audubon of Florida – Monitoring the Roseate Spoonbill
Bird Endowment Nido Adoptivo
Galapagos Tortoise Movement Ecology Program
Gharial Ecology Project
IUCN/SSC Crocodile Specialist Group
King Cobra – Agumbe Rainforest Research Station (ARRS), Western Ghats
Madagascar Fauna and Flora Group (MFG) – Betampona Natural Reserve
Sea Turtle Hospital at Whitney
Seafood Watch
Turtle Survival Alliance (TSA)
Vulture Conservation Programme (VulPro)

Green Practices

ENERGY
Documented Amount Spent
Documented Amount Used

WATER
Documented Amount Spent
Documented Amount Used

Research
A Preliminary Analysis of Prolonged Absorption Rate of Ponazuril in Red-Footed Tortoises (Chelonoidis carbonaria)
Alligator Egg Degradation Study Under Artificial Incubation
Antimicrobial Peptide Release in American Alligator Blood Cells
Chemical Analyses of Crocodylian Skin Gland Lipids
Comparison and Analysis of Vocalizations From the World’s Crocodilians to Develop a Database for the Crocodilian Specialist Group (CSG)
Crocodilian Color Change
Cuban Crocodile Molecular Analysis
Cuban Crocodile Nutritional Analysis
Evaluation of Incubation Styles by Investigating Eggshell Micro- and Ultra-Structure
Unprovoked Mouth Gaping Behavior in Extant Crocodylia

THE FLORIDA AQUARIUM

Education
Adopt A School Partnerships
AMIKids Tampa Partnership
Aqua Tots
Behind the Scenes Tours (Non School Groups)
BOAT Stations
Camps (School-Year)
Camps (Summer)
Dive With the Sharks
Evening Tide Talks
Explorers Club
Homeschool Classes
Interactive Touch Experiences
Junior Educators
Lifelong Learning Program
Mission Tampa Bay
Party With the Fishes (Birthday Parties)
Regional Oceans Conference for Students (ROCS)
School Group Classroom Programs
Scout Badge Workshops (Both Boy Scouts and Girl Scouts)
Sleep With the Fishes (Sleepover Program)
Spring to Shore (Formally What’s in your Watershed?)
Swim With the Fishes
Teacher Workshops
Water Wheels (Outreach)
Watershed Investigations
Wild Dolphin Adventure Cruise

Field Conservation
Artificial Fertilization and Larval Rearing of Threatened Caribbean Coral Species for Reintroduction to Natural Reefs in the Florida Keys
Cuba Coral Project
Fantasy Island: A Cooperative Conservation and Education Project
Reptile Conservation Projects
Sea Turtle Rehabilitation
Shark Reproduction and Restoration
Southern African Foundation for the Conservation of Coastal Birds (SANCCOB)
Swallow-Tailed Kite Conservation Project

THE SEAS
Education
Abaco Reef Restoration and Environmental Education
Aqua Tours
Aulani Rainbow Reef
Aulani Supplied Air Snorkeling
Castaways Rays
DiveQuest
Dolphins in Depth
Seas Onstage Guest Programs
Seas Youth Education Series (YES) Programs
World Oceans Day

Field Conservation
African Manatee Research and Conservation
Angel Shark Conservation Programme
Bahamas Piping Plover Recovery Initiative
Community Engagement for Dolphin Conservation
Connect to Protect – Reverse the Decline of Corals
Connect to Protect – Reverse the Decline of Sea Turtles
Connect to Protect – Reverse the Decline of Sharks and Rays
Conservation of Eastern Pacific Leatherback Turtles
Conservation of the Douala-Edea Landscape
Conserving Coastal Sharks and Rays
Conserving Sea Turtles Through Community Participation and Stakeholder Stewardship
Coral Reef Youth Education Program
Developing (Elkhorn) Coral Restoration Techniques
Developing Solar-Powered Illuminated Nets to Reduce Sea Turtle Bycatch in Gillnet Fisheries
Establishing the Next Generation of Resilient Coral Species
Franciscana Interactions With Argentinean Fisheries
Hawaiian Monk Seal Conservation and Education
Latin America Conservation Capacity-Building
Life in a Biosphere Reserve

Manta Conservation and Capacity Building
Outreach Inspiring Lake Sturgeon Conservation
Recovery of Endangered Smalltooth Sawfish
Right Whale Emergency Initiative
Saving Wildlife: Coral Reefs
Saving Wildlife: Reversing the Decline of Sharks and Rays
Saving Wildlife: Sea Turtles
Sustainable Fisheries Partnership
Tour de Turtles – Sea Turtle Conservancy
Urban Shark Conservation/Research Program
Wading Birds and Oyster Reefs

Green Practices
ENERGY
Documented Amount Spent
Documented Amount Used
Generated Renewable Energy On-Site
Purchased Renewable Energy

FOOD
Sourced Local Food or Grew it On-Site

FUEL
Documented Amount Spent
Documented Amount Used

GREEN PRACTICES IMPLEMENTED
Alternative Fuel Usage for On-Site Fleet
Alternative Transportation Discounts for Guests
Building Energy Management
Commingled Recycling
Community-Based Sustainability Projects
Completed Greenhouse Gas Inventory
Composting (On-Site or Off-Site)
Diverted or Recycled Construction Waste
Energy Submetering
Generated Energy through Anaerobic Digester
Generated Solar or Wind Energy
Graywater Reuse and/or Rainwater Harvesting
Green Purchasing Policy/Green Procurement
Procured Local Food for On-Site Animals and/or Guest
Purchased Carbon Offset(s) for On-Site Utility Use
Purchased Green Power or Renewable Energy Credits (RECs)
Smart Building Strategies
Stormwater Management Program
Used Enterprise (IT) Solutions to Track and Measure Sustainability Performance
Used Environmental Management System
Waterwise Landscaping

GREENHOUSE GAS EMISSIONS
Documented Amount of Greenhouse Gas Emissions

PLANS, POLICIES, AND BUDGETS
Dedicated a Line Item in the Budget for Green Practices
Developed or Updated a Sustainability Plan (or Equivalent)
Developed or Updated a Sustainability Plan
Specified a Portion of the Amount Saved for Next Year’s Green Practices

WASTE
Documented Amount Composted
Documented Amount Recycled
Documented Amount Sent to Landfill

WATER
Documented Amount of Wastewater Generated
Documented Amount Spent
Documented Amount Used

Research
A Multi-Faceted Health Assessment for a Sample of Nesting Loggerhead Sea Turtles
Addendum to Head and Lateral Line Erosion Syndrome Research: Effects of Ful-Humix®-Laden Gel Food (Added Dissolved Organic Matter) on the Development of HLLES
Assessment of Social Rake Marks in Common Bottlenose Dolphins (Tursiops truncatus)
Cetacean Welfare Study
Coelomic Fluid Analysis in Normal and Abnormal Elasmobranchs
Contraceptive Drug Trials at Disney’s Animal Kingdom and The Seas

Developmental Life Cycle of Marine Monogeneans (Decacotyle sp.) on Captive White-Spotted Eagle Rays and Possible Treatments
Effects of Dietary Vitamin D Supplementation and UV Light Exposure on Nutritional Health Parameters Including Vitamin D in Sea Turtles
Evaluation of an Aquatic Gel Diet Made With a Novel Feed Ingredient
Evaluation of Stress in Elasmobranchs
Lionfish & Coralliphic Snail Research: Abaco Reef Restoration and Environmental Education Addendum
Monitoring the Effects of Construction Noise on Resident Animals in Regards to Space Utilization
Serum Iodine Levels in Round Ribbontail Rays (Taeniura meyeni) (Black Blotched Ray) After Consumption of a Commercially Prepared Supplement
Sex Determination of French Grunts (Haemulon flavolineatum) in The Seas’ Recirculating Research System
Space Utilization of Resident Sand Tiger Sharks
Statewide Sea Turtle Nesting Surveys
Studies of the Dolphin Mind: Echolocation, Communication, and Social Life
Studies on the Development of Head and Lateral Line (HLL) Disease
The Seas Research Focused Labor
To Determine the Plasma Concentrations of Oral Praziquantel in Plasma of Spotted Eagle Rays
Training a Scent Detection Dog to Locate Sea Turtle Nests and Gopher Tortoises
Understanding Causal Agents of Southern Stingray Reproductive Disease for Treatment Development
Use of a Scent-Detection Dog for Sea Turtle Nest Monitoring and Conservation Outreach
Using Ultrasound and Metabolic Parameters to Assess Energy and Body Condition Stores of Elasmobranchs (Retrospective Study)
Using Ultrasound to Measure Cardiac Parameters of Stingrays (Retrospective Study)
**WHITE OAK CONSERVATION CENTER**

**Education**
- Adult Education Workshop: Florida Master Naturalist Program
- Conservation Summer Camp
- K-12 Field Experiences (Off-Site)
- K-12 Field Experiences (On-Site)
- Monthly Public Special Event
- Off-Site Lectures and Presentations
- Staff Guided Public and Private Wildlife Tours
- Topics in Conservation
- Undergraduate/Graduate Level Field Experience

**Field Conservation**
- Antelope Restoration – Chad
- Florida Grasshopper Sparrow Propagation and Recovery Program
- Florida Panther Rehabilitation and Reintroduction
- IUCN/SSC Antelope Specialist Group
- Madagascar Tortoise Rescue
- Mississippi Sandhill Crane Propagation and Recovery Program
- Okapi Conservation
- Whooping Crane Restoration

**Research**
- Assessment of Stress by Transport of Okapi (Okapia johnstoni)
- Coxiella burnetti Exposure of the White Rhinoceros (Ceratotherium simum) in South Africa
- Curvularia Treatment with Itraconazole in the Black Rhinoceroses (Diceros bicornis)
- Detection of Lyme (Borrelia burgdorferi) and Other Tick-Borne Diseases in Serum Samples from Captive Cheetahs
- Determining a Correlation Between Serum Amyloid A (SAA) and Zinc Deficiency in Captive Cheetahs (Acinonyx jubatus)
- DNA Polymorphism Associated With Variation in Susceptibility to Porcine Circovirus 2
- Examining the Effectiveness of a Low-Power Acoustic Deterrent to Discourage Bats from Treated Airspace
- Giraffe Neoplasia

**Grasshopper Sparrow Genome Project**
- Identification of Preimplantation Factor in Pregnant White Rhinoceros
- Identifying and Sequencing Atoxoplasma spp. Affecting Ammodramus savannarum floridanus
- Impact of Dietary Phytate Supplementation on Iron and Phosphorus Utilization in Black Rhinoceros
- Influence of *Ex-Situ* Management on Gut Microbiota of the Southern Black Rhinoceroses (Diceros bicornis)
- Investigating Embryo Loss Using Embryo Transfer
- Investigating Genetic Differences in Okapi With Pregnancy Hypertension: are There Similarities With Human Pre-Eclampsia?
- Molecular Basis of Abnormal Iron Metabolism in Southern Black Rhinoceros
- Monitoring of Florida Panther Genetic Introgression Through Reproductive Assessment and Banking of Genetic Material
- Optimizing a Field-Based Dung-to-DNA Isolation Technique for Studying Rhino Social Structure and Population Census
- Ossicones in Giraffidae
- Pharmacokinetics of a Single Oral Dose of Phenylbutazone in Southern White Rhinoceroses (Ceratotherium simum simum)
- Presence of Grass Endophytes and Mycotoxins in Florida Pastures
- Prevalence, Risk Factors, and Survival of Zoo Animals With Cancer
- Quantifying Serum Amyloid A (SAA) Concentrations in Captive Cheetahs
- Relatedness in Southern White Rhinoceroses and Implications for Breeding Management
- Statistical Evaluation of Subject-Based Reference Values for Potential Clinical Applications in a Population of Cheetahs (Acinonyx jubatus) and White Rhinoceroses (Ceratotherium simum)
- Use of Molecular Diagnostics for Rapid Detection of Wildlife Pathogens
- White Rhino Calf Behavioral Study: Captive-Born vs Wild Caught Female
- White Rhinoceroses (Ceratotherium simum) Hemoparasite Identification and Characterization via PCR
ZOO MIAMI

Field Conservation

Atala Reintroduction
Audubon Christmas Bird Count
AZA FrogWatch USA
AZA Tiger SSP – Tiger Conservation Campaign
Bat Acoustical Survey of Zoo Miami Grounds
Butterfly Surveys of Pine Rockland and Developed Grounds of Zoo Miami
Cheetah Outreach
Citizen Science: Invasive Fish Removal Derby
Conservation and Research Manager Expenses
Conservation and Research Specialist
Florida Bonneted Bat Rehabilitation
Hope Gardens and Zoo Jamaican Iguana Headstart Facility
International Elephant Foundation (IEF)
International Iguana Foundation (IIF)
International Rhino Foundation (IRF)
Invasive Species and Fire Management of the Zoo Miami Pine Rocklands
Investigating the Habitat Usage and Impacts of Non-Native Boa Constrictors
Komodo Survival Program
Native Bat Roosting Mitigation and Enhancement
New Nature Foundation
Okapi Conservation Project
Pan American Conservation Association
Pine Rockland Public Restoration
Puerto Rican Crested Toad Recovery Program
Range Wide Conservation Program for Cheetah and African Wild Dogs
Restoration of Sea Turtle Nesting Habitat on Elliott Key, Florida
Reversing Tropical Amphibian Declines
Ron Magill Conservation Heroes Award
Ron Magill Conservation Scholarship
The Ecology of Gopher Tortoises in the Pine Rocklands
Tree Kangaroo Conservation Program
Turtle Survival Alliance (TSA) – Radiated Tortoise

Zoo Miami Butterfly Conservation Area
Zoo Miami Lake Enhancement Project

Green Practices

ENERGY
Documented Amount Spent
Documented Amount Used
Generated Renewable Energy On-Site

FOOD
Sourced Local Food or Grew it On-Site

FUEL
Documented Amount Spent
Documented Amount Used

GREEN CERTIFICATIONS
Certified as a Wildlife Habitat

GREEN PRACTICES IMPLEMENTED
Commingled Recycling
Composting (On-Site or Off-Site)
Diverted or Recycled Construction Waste
Energy Submetering
Generated Solar or Wind Energy
Green IT
Smart Building Strategies
Water Submetering

PLANS, POLICIES, AND BUDGETS
Developed or Updated a Sustainability Plan

WASTE
Documented Amount Recycled
Documented Amount Sent to Landfill

WATER
Documented Amount of Wastewater Generated
Documented Amount Spent
Documented Amount Used
Research
Anteaters and Highways Project
Cuban Crocodile Subcaudal Scale Irregularities
Ecology of Invasive Burmese Pythons in Big Cypress National Preserve
Exploring Exuma Sound
Hormonal Manipulation of Male Burmese Python Pilot Study
Lowland Tapir Conservation Initiative
Population Genetic Characterization of Highly Fragmented Florida Duskywing Relict Populations
Securing the Habitats of Critically Endangered Taita Warty Frog (*Callulina dawida*) in the Taita Hill Forest in Kenya Through Community Involvement
South-East Zoo Alliance for Reproduction and Conservation
Spectacled Eider Tracking
The Natural History, Habitat Usage, and Origins of Florida Flamingos
The Prusten Project

ZOOTAMPA AT LOWRY PARK

Education
Animal Interactive Experiences – Aldabara Encounter
Animal Mingles/Meet and Greets
Bird of Prey Presentation
Birthday Parties
Camps
Early Childhood Education – Childcare
Keeper Chats (Animal Mingles, Red Wold, Manatee, Koala, Aldabara, Orangutan, Birds of Prey, and Clouded Leopard)
Koala Photo Encounter Presented Yob Family Foundation
Scavenger Hunts
Self-Guided Field Trip
Signature Experiences Tours (Greater One Horn Rhino, White Rhino, African Elephant, and African Penguin)
Sleepovers
Teen Workshops
Teens for Tampa Bay
Tot Classes
World Strides Travel Program

Field Conservation
BOS – Bornean Orangutan Survival Foundation
CrocFest
Florida Fish and Wildlife Conservation Commission (FWC) – Florida Black Bear Rescue, Rehab, and Release Program
Florida Panther Recovery Plan
Freeland
Gyps Vulture Restoration Program
Manatee Rescue, Rehabilitation, and Release
Marine Mammal Research Patrol
Okapi Conservation Project
Painted Dog Research Trust
Pan African Sanctuary Alliance (PASA) – Primate Care Training
Turtle Survival Alliance

Green Practices
ENERGY
Documented Amount Spent
Documented Amount Used

FUEL
Documented Amount Spent
Documented Amount Used

GREEN PRACTICES IMPLEMENTED
Building Energy Management
Commingled Recycling
Composting (On-Site or Off-Site)
Energy Submetering
Generated Solar or Wind Energy
Green Building Policy/Commitment
Procured Local Food for On-Site Animals and/or Guest
Smart Building Strategies
Stormwater Management Program
Wastewater Reduction
Water Submetering
Georgia

GEORGIA AQUARIUM

Field Conservation
Georgia Dolphin Ecology Project
Health and Environmental Risk Assessments (HERA) – Dolphins
Health and Environmental Risk Assessments (HERA) – Indian River Lagoon Dolphin Health Assessment
Health and Environmental Risk Assessments (HERA) – Manatees
Manta Ray Population Assessment
Whale Shark Genome Project
Whale Shark Population Study – Worldwide

Green Practices

ENERGY
Documented Amount Spent
Documented Amount Used
Generated Renewable Energy On-Site
Purchased Renewable Energy

FUEL
Documented Amount Spent
Documented Amount Used

GREEN PRACTICES IMPLEMENTED
Energy Submetering

WASTE
Documented Amount Sent to Landfill

WATER
Documented Amount of Wastewater Generated
Documented Amount Spent
Documented Amount Used

Research
Flukebook
Marineland Mantas
SEZARC – Sand Tigers
Whale Sharks St. Helena

THE ZOO AT CHEHAW

Green Practices

GREEN PRACTICES IMPLEMENTED
Composting (On-Site or Off-Site)
Procured Local Food for On-Site Animals and/or Guest

ZOO ATLANTA

Education
Adult Volunteer Program
Adventure Cubs
Birdwatch
Camp – School’s Out
Camp – Spring Break
Camp – Summer
Camp – Winter
Case for Conservation
Docent Program
Educator Day
External Volunteers
Family Volunteer Program
Homeschool Academy
Intern Program
Interpretive Program – Animal Tales
Interpretive Program – Conservation Carts
Interpretive Program – Conservation Workshop
Interpretive Program – Forage Like a Kori
Interpretive Program – Groove Like an Animal
Interpretive Program – Vet Academy
Interpretive Program – Wild Women
Interpretive Program – Zoo’s Clues
Interpretive Program – Quarters for Conservation
Interpretive Program – STEM Sunday
**Green Practices**

**ENERGY**
- Documented Amount Spent
- Documented Amount Used

**FUEL**
- Documented Amount Spent
- Documented Amount Used

**GREEN PRACTICES IMPLEMENTED**
- Commingled Recycling
- Composting (On-Site or Off-Site)
- Diverted or Recycled Construction Waste
- Green IT
- Purchased Green Power or Renewable Energy Credits (RECs)
- Smart Building Strategies

**PLANS, POLICIES, AND BUDGETS**
- Developed or Updated a Sustainability Plan

**WATER**
- Documented Amount of Wastewater Generated
- Documented Amount Spent
- Documented Amount Used

**Research**
- Blood Collection for Paternity Analysis of Captive Guatemalan Beaded Lizards to Guide Captive Management
- Great Ape Heart Project
- Primate Cognition
- Taxonomy and Biodiversity of Amphibians and Reptiles
- Veterinary Research

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**Keeper for a Day**
- Nightcrawler – Groups
- NightCrawler Overnights – Family

**Professional Learning**
- Scout Day
- Scout Workshop
- Self-Guided Field Trips
- The HIVE
- Volunteen Program

**Wild Encounters**
- Wild Walks
- Zoo Challenge
- ZOOMobile – Outreach

**Field Conservation**
- Amphibian Ark
- Atlanta Audubon Society
- Bird Studies Canada
- Birdlife Botswana
- Bush Dog – St Louis Zoo
- Community-Based Red Panda Conservation and Monitoring in Eastern Nepal
- Conservation South Luangwa
- Dian Fossey Gorilla Fund International
- Giant Panda Conservation
- Headstarting Diamondback Terrapins
- International Reptile Foundation
- Lion Guardians U.S.
- Madagascar Fauna and Flora Group (MFG)
- Pine Snake Conservation – Clemson University
- Project Golden Frog
- Red Panda Network (RPN)
- Sahara Conservation Fund (SCF)
- Tigers – Minnesota Zoo Foundation
- Vulture Conservation Programme (VulPro)
- Wildlife Conservation Society (WCS) – 96 Elephants
- World Parrot Trust (WPT)
Idaho

IDAHO FALLS ZOO AT TAUTPHAUS PARK

Education
- Behind the Scenes Tours
- Career Days
- Exploration Stations
- Junior Zoo Crew
- Penguin Interaction Program
- Quarters for Conservation
- Special Events
- Spring Break Classes
- STEM Day at the Zoo
- Water Awareness Festival
- Weeklong Summer Camp
- Winter Break Classes
- Zoo Tots Classes
- Zoomobiles

Field Conservation
- Gorongosa National Park
- Snow Leopard Trust (SLT)
- Southern African Foundation for the Conservation of Coastal Birds (SANCCOB)

Research
- St. Anthony Dunes Tiger Beetle Distribution
- Summer Entry by Humans Into Bat Roosts in the Sand Creek Desert, Idaho

ZOO BOISE

Field Conservation
- American Association of Zoo Keepers (AAZK) – Bowling for Rhinos
- AZA SAFE – Cheetah Conservation Action Plan (CAP)
- Cottonwood Creek Restoration
- EcoHealth Program in Gorongosa National Park
- Gorongosa National Wildlife Park Restoration
- IUCN/SSC Asian Wild Cattle Specialist Group – Saola Working Group

Illinois

CHICAGO ZOOLOGICAL SOCIETY – BROOKFIELD ZOO

Education
- A Zoo for All: Access and Inclusion
- Advanced Inquiry Program Master’s Degree
- Backstage Adventures
- Badges
- Bridges
- Certified Interpretive Guide Training
- College Experiential Learning Opportunities
- Common Foundations in Informal Science Learning for Zoo Staff and Volunteers
- CZS Sarasota Dolphin Research Program Undergraduate Internship Program
- Dolphins in Action Presentations
- Family Fun Saturdays
- Free Field Trips for Illinois Schools
- Graduate Teacher Classes

Green Practices

FUEL
- Documented Amount Spent
- Documented Amount Used

GREEN PRACTICES IMPLEMENTED
- Building Energy Management

Research
- Development of Reintroduction Protocol for Southern Idaho Ground Squirrel

New Nature Foundation Khau Cha Forest Project
- Reintroduction of Southern Idaho Ground Squirrels
- Saving the Snowy Cats of the Himalaya
- Table Rock Fire Restoration
- Wildlife SOS – ForestWatch!

Table Rock Fire Restoration
- Wildlife SOS – ForestWatch!
Hamill Family Play Zoo
Inclusive Visits
Institute of Science Teaching Excellence
King Conservation Science Scholars
Lecture Series
Nature Play Zoo Adventure Passport (Nature Play ZAP!)
NatureStart AZA Course
NatureStart Networks
Postdoctoral Fellowship in Veterinary Anesthesia and Analgesia
Project SEARCH
Roving Naturalists
Science Fellows Program
SCIENCES (Supporting a Community’s Informal Education Needs) Project
Sleepover Safari
The World’s Longest-Running Study of a Wild Dolphin Population – Lessons From 4 Decades and 5 Generations
Volunteer Program
Wild Encounters, Keeper Chats, and Ambassador Animals Program
Zoo Adventure Passport (ZAP!)
Zoo Camp
Zoo Explorers Club
Zoological and Aquatic Animal Residency Program – Illinois

Field Conservation
Behavioural Response of Sea Turtles to the FaunaGuard Turtle Module
Biopsy Sampling
Bottlenose Dolphin Health Assessment in Sarasota Bay
Community Engagement for Dolphin Conservation
Dolphin Communication Research with DTAGs
Ecological and Ethnological Basis for Pangolin Management in and Around the Tanoe-Ehy Swamp Forest, Côte d’Ivoire
Franciscana Dolphins
Gulf of Mexico Dolphin Identification System
Post-Release Monitoring of Injured, Out-of-Habitat, or Stranded Cetaceans in the Southeastern U.S.
Punta San Juan Health Assessments

Red Tide Intervention and Study
Sarasota Dolphin Research Program
Species Conservation Toolkit Initiative
Tagging Project
Vaquita Project

Green Practices
GREEN PRACTICES IMPLEMENTED
Alternative Transportation Benefits for Staff
Building Energy Management
Commingled Recycling
Diverted or Recycled Construction Waste
Graywater Reuse and/or Rainwater Harvesting
Green Building Policy/Commitment
Green IT
Green Purchasing Policy/Green Procurement
Procured Local Food for On-Site Animals and/or Guest
Wastewater Reduction

COSLEY ZOO
Education
Animal Encounter
AZA FrogWatch USA Cosley Zoo
Bobcat’s Backstage
Camps
Critter Cart
Eco Exploration Backpack Tours
Jr. Zookeeper Program
Morning Chores
Park District Programs
Party for the Planet
School & Group Programs
Scout Programs
Teacher Workshop
Training Demonstrations
Zoo to You
Field Conservation
- Asian Wild Horse
- AZA FrogWatch USA
- AZA SAFE – Vaquita
- Blanding’s Turtle Headstart Project
- Giraffe
- The Great Backyard Bird Count

Green Practices

ENERGY
- Documented Amount Spent
- Documented Amount Used

FUEL
- Documented Amount Spent
- Documented Amount Used

GREEN CERTIFICATIONS
- Certified as a Wildlife Habitat

GREEN PRACTICES IMPLEMENTED
- Building Energy Management
- Commingled Recycling
- Composting (On-Site or Off-Site)
- Graywater Reuse and/or Rainwater Harvesting
- Stormwater Management Program

WASTEN
- Documented Amount Recycled

WATER
- Documented Amount of Wastewater Generated
- Documented Amount Spent
- Documented Amount Used

Research
- Blanding’s Turtle Head Start Program Microbiome Project
- Hi-C Genomic Zoo

HENSON ROBINSON ZOO

Green Practices

GREEN PRACTICES IMPLEMENTED
- Commingled Recycling
- Composting (On-Site or Off-Site)
- Diverted or Recycled Construction Waste

JOHN G. SHEDD AQUARIUM

Education
- Animal Chats
- Animal Encounters
- Aquatic Presentations
- Assistantships
- Behind The Scenes Tours
- Beluga Encounters
- Caribbean Reef Dive
- Club Shedd
- Fish Tales Educator E-news
- Floor Engagements
- Freshwater Ecology
- Great Lakes Action Days
- Great Lakes Digital Badging
- Group Overnights
- High School Lake Ecology
- High School Marine Biology
- Interpretive Volunteers
- Kayak For Conservation
- Learning Labs: 3rd-12th Grades
- Live at Shedd
- Live From Behind the Scenes
- Marine and Island Ecology of The Bahamas
- NOAA How & Why We Explore The Deep Ocean Workshop
- Penguin Encounter
- Pre-Presentation Trivia
- Pre-Presentation Turtle Time Activity
- Science Tech Treks
- Shark Feeding Tour
- Shedd Science Educator Conference
Green Practices

ENERGY
Documented Amount Spent
Documented Amount Used
Generated Renewable Energy On-Site

FUEL
Documented Amount Used

GREEN PRACTICES IMPLEMENTED
Building Energy Management
Commingled Recycling
Community Supported Agriculture (CSA) Program for Staff
Community-Based Sustainability Projects
Composting (On-Site or Off-Site)
Diverted or Recycled Construction Waste
Energy Submetering
Generated Solar or Wind Energy
Graywater Reuse and/or Rainwater Harvesting
Green Purchasing Policy/Green Procurement
Procured Local Food for On-Site Animals and/or Guest
Smart Building Strategies
Stormwater Management Program
Wastewater Reduction
Water Submetering
Waterwise Landscaping

GREENHOUSE GAS EMISSIONS
Documented Amount of Greenhouse Gas Emissions

PLANS, POLICIES, AND BUDGETS
Dedicated a Line Item in the Budget for Green Practices

WASTE
Documented Amount Composted
Documented Amount Recycled
Documented Amount Sent to Landfill

WATER
Documented Amount Spent
Documented Amount Used
Research
Assessment of Proposed Marine Mammal Water Quality Indicator Organisms in a Recirculating Artificial Seawater System
AZA Western Pond Turtle SSP – The Role of the Microbiome in the Reintroduction of Species
Baylor Hi C Genomic Zoo
Cetacean Welfare Project
Metagenomic Investigation Into the Cause of Shell Disease in Western Pond Turtles (Actinemys marmorata)
Microbial Diversity as a Disease Management Tool
Mycobacterial Control Strategies
Role of Water, Treatment, Nutrients, and Physicochemical Factors in Regulating Viral and Microbial Composition in an Aquarium by Metagenomics Approaches
Sea Star Social Behavior

LINCOLN PARK ZOO
Education
Access Tours
Amplify
Animal Encounters
Animal Enrichment Workshops
Ape Cognition
Ape Termite Fishing
Artecito
Campout at the Zoo
Canvas for Conservation
Chicago Environmental Stewards Spring Break Camp
Community Pop Up Events
Conservation Ambassador Board
Conservation Camp (School Holidays)
Conservation Camp (Summer)
Cow Milking
Douglass 18
DreamNight
Educator Conference
Free-Flight Feeding
Gorilla Operant Conditioning
Guest Engagement Chats
Guest Engagement Leadership Program
Guest Engagement Mobile Learning Stations
Hammond School Learning Garden
LEAP – Learn Explore and Play
Learning Lab Pop-Ups
Morning Safari/Twilight Safari
Nature Boardwalk Tours
Partners in Fieldwork
Penguin Encounters
Play Days at the Farm
Programa ProTEJA
Research Apprenticeship Program
Science For All Students
Seal Training and Feeding
Second Saturday Garden Tours
Sing Along With Mr. Singer
Snow Monkey Science
Teacher Workshops
Up Close With Polar Bears
WILD Marshall Square Sculpture Program
Wine and Wildlife
Young Researchers Collaborative
Zoo Crew Camp
Zoo Explorers
Zoo Intern Program

Field Conservation
Administrative Costs for Staff Managing Field Conservation Grants
AZA SAFE – Founders Circle
Bali Mynah Reintroduction Project
Bird Trade in the United States of America: A Review and Analysis of the Legal and Illegal Imports of Bird Species from Asia Into the U.S.
Black Footed Ferret SAFE Administration
Building Evidence for Effective Conservation Interventions Around the Serengeti Ecosystem
Developing Non-Invasive Methods to Monitor the Health of Urban Bats
Endangered Black-Crowned Night Heron Wild Colony Support
Evaluating an Incentive-Based Payment to Promote Human-Lion Coexistence in Ngorongoro Conservation Area, Tanzania
Evaluating Conservation and Development Impacts of Serengeti National Parks on Adjacent Communities
Goualougo Triangle Ape Project (GTAP)
Great Lakes Piping Plover Recovery Effort
Investigating Denver’s Vanishing Prairie Dogs
Investigating the Effect of Population Density and Provisioning on Stress Physiology in the Black-Crowned Night Heron Across Two Urban Zoos
Little Brown Bat Priority Species
Long-Term Monitoring of an Eastern Massasauga Rattlesnake (EMR) Population in Southwest Michigan
Miscellaneous Conservation Donations to Field Conservation Organizations
Monitoring Bat Diversity in the Chicago Area and the Influence of Prey Availability
Monitoring Infertility in Black-Footed Ferrets
Monitoring the Health and Stress of Urban Wildlife and Implications on Human Health
Painted Turtle Relocation and Monitoring at Nature Boardwalk
Pilot Study: Evaluating the Use of Prostaglandin Metabolite Assay to Determine Pregnancy in the Black-Footed Ferret
Population Biology Advising for Reintroduction of Greater Sage Grouse in Canada
Population Management Advising for Species Recovery and Conservation Assurance Populations
Population Viability Analysis (PVA) for Tanzanian Eastern Black Rhinoceros Populations
Population Viability Analysis (PVA) of the Eastern Indigo Snake
Population Viability Analysis (PVA) of Zoo and Wild Populations of Endangered Red Wolves (Canis rufus)
Puerto Rican Parrot Population Management
Regional Survey of Amphibian Chytrid (Batrachochytrium dendrobatidis) and Amphibian Stress
Serengeti Health Initiative - Distemper and Rabies Vaccination Project
Southern African Foundation for the Conservation of Coastal Birds (SANCCOB) - Penguin Rehabilitation
Tracking Fecal Metabolites to Determine Estrous Cycle and Cortisol Levels of Tamiasciurus hudsonicus grahamensis in an Ex-Situ Setting
Trends in Long-Term Urban Bird Research
Understanding Stress Physiology of the Mountain Gorilla
Urban Wildlife Information Network (UWIN)
Using Camera Traps to Assess Mammalian Community Composition, Abundance, and Diversity
Using Mate Choice to Improve Reproductive Success in the Black-Footed Ferret

Green Practices
FUEL
Documented Amount Spent
Documented Amount Used
GREEN CERTIFICATIONS
Certified by the Green Restaurant Association
GREEN PRACTICES IMPLEMENTED
Alternative Transportation Benefits for Staff
Commingled Recycling
Composting (On-Site or Off-Site)
Diverted or Recycled Construction Waste
Green IT
Waterwise Landscaping

Research
A Meta-Analysis of Shifts in Wildlife Health With Urbanization
A Test of Gorilla Short Term Memory (ManyPrimates Pilot Study)
Administrative Costs for Staff Managing Research Grants
An Interdisciplinary Evaluation of the African Penguins’ Behavior, Welfare, and Educational Impact at Lincoln Park Zoo
Ape Cognition Using Touchscreen Testing
Avian Model for Clinical Use of Adequan®
Behavioral and Physiological Effects of Construction Activity and Noise on the Baringo Giraffe Housed at Lincoln Park Zoo
Behavioral Monitoring of Chimpanzees and Gorillas
Behavioral, Physiological, and Spatial Patterns of Light Pollution in Chicago, Illinois
Case Series Evaluation of Smooth Green Snake Oral Squamous Cell Carcinoma
Chimp Haven

ChimpCARE

Classification and Management Assessment of Canine Fractures in Captive Managed Populations of Great Apes

Cognitive Bias in Japanese Macaques, Chimpanzees, and Gorillas

Combining Site-Based Initiatives and Collaborative Partnerships to Strengthen Great Ape Health

COMPADRE: COMADRE Plant and Animal Matrix Database

Comparing the Stress of Urban and Rural Red-Winged Blackbirds

Contribution of Zoos and Aquariums to Endangered Species Recovery in the United States

Costs Associated With Testing Field Equipment That Will be Used in Research Projects

Costs for Any Staff Serving on Institutional Animal Care and Use Committee (IACUC), Research and Institutional Review Board (IRB) Committees

Costs of Person(s) Managing Review of Research in the Institution, Including Any Institutional Animal Care and Use Committee (IACUC), Research Committee or Institutional Review Board (IRB) Committees

Cross-Facility Survey of Chimpanzee Welfare Measures

Cross-Validation of Androgen Metabolite Enzyme Immunoassay (EIA) Results Using Alternative Substrates

Determining the Predominant Glucocorticoid in Sea Otters Using an Adrenocorticotropic Hormone (ACTH) Challenge

Determining the Relationship Among Baculum Size and Shape, Genetic Relatedness, and Breeding Success in the Endangered Black-Footed Ferret

Determining the Relationship Among Egg Incubation Temperature, Immune Function, and Glucocorticoid Production in American Robin (Turdus migratorius) Nestlings

Developing a Meta-Population Model for Heterogeneous Environments

Developing Noninvasive Methods to Assess Health in Bats Threatened by White-Nose Syndrome

Developing Techniques to Measure Glucocorticoids in Toenails of the Fiji Crested Iguana

Effects of Contraceptive Implants on Macaque Cycling/Fertility

Effects of Urbanization on Long-Term Stress in Mammalian Communities in the Chicagoland Area

Electrocardiogram (EKG) Monitoring of Chimpanzees With Behavioral Overlay

Establishing Non-Invasive Predictive Tools to Monitor Hormones, Microbiome, and Behavior During Stress and Senescence in Octopus

Evaluating Novel Techniques to Assess Chimpanzee Welfare in a Sanctuary Setting

Evaluating Socioecological Predictors of Stress and Health Condition in Western Lowland Gorillas

Evaluation of Animal Ambassador Experiences

Examining the Local and Migratory Movements of Black-Crowned Night Herons

Exploring the Biodiversity of Snakes Surrounding the Lincoln Park Zoo’s Nature Boardwalk

Facilitation of External Research

Flexible Problem-Solving in Great Apes

Gathering Hormonal Measures of a Gorilla Bachelor Group

Goods, Equipment, or Supplies Donated to Research Projects Outside of the Institution

Goualougo Triangle Ape Project (GTAP) – Video Analysis Lab

Health and Behavior of Migratory and Resident Urban Canada Geese

House Sparrow Microbial Ecology and Endocrinology

Impact of Lighting on Nocturnal Mammal Welfare

Institutional Support (Direct and In Kind) for Hosting of Scientific Conferences Focused on Presentation of Research Results

Investigating Diversity, Stress, and Health of Small Mammal Communities Across an Urban to Exurban Gradient

Investigating Ovulation Failure in the Endangered Black-Footed Ferret

Investigating Post-Hatch and Post-Transfer Survival in the Blue-Grey Tanager Species Survival Plan Program

Investigating the Influence of an Ape’s Social Group on Their Individual Decision-Making

Investigating Whether and How Invasive Plants are Impacting the Presence and Health of Three Species of Conservation Concern – Field Sparrows, Yellow-Breasted Chats, and Bell’s Vireos

Investigation of Hormone Metabolites in Mountain Gorilla Fecal Samples Using High-Performance Liquid Chromatography (HPLC)

Japanese Macaque Behavioral Monitoring

Japanese Macaque Personality Assessment: Development of a Novel Scale for Use in Zoo Setting

Japanese Macaque Touchscreen Research
Local Drivers of Bushmeat Hunting in the Greater Serengeti Ecosystem, and Its Impact on Migratory Wildlife Populations
Message Framing Effects on Animal Welfare Donation Appeals
Microbiome Comparisons Among Great Apes and Humans
Patterns in Demography Based on Endangerment Status
PMCTrack – Analyses of Historic Breeding and Transfer Recommendations in AZA’s SSPs
Population Viability Analyses (PVAs) of AZA Species Survival Plans® (SSPs)
Predictors of Wounding in Japanese Macaques
Prospective Assessment of the Incidence of Mammary Neoplasia in Chimpanzees (Pan troglodytes): Pathology, Genetic Markers, and Clinical Application
Rat Zoonotic Pathogens Across Chicago Neighborhoods
Retrospective Mortality Review in Chimpanzees
Retrospective Risk Assessment of Perianesthetic Mortality in Captive Managed Populations of Chimpanzees (Pan troglodytes)
Salary and Benefit Costs of Staff Involved in Mentoring Undergraduate, Graduate, or Postgraduate Training Focused on Scientific Research
Sandy Potatoes: Setting the Stage for Behavioral Transmission in Japanese Macaques
Small Mites, Big City: Using Large-Scale Wildlife Camera Monitoring to Examine the Spatio-Temporal Dynamics of Sarcoptic Mange in Chicago’s Urban Coyotes
Testing the Use of Surrogate Demographic Data for Species Recovery
Training and Administration of Citizen Science Projects
Travel Costs Associated With Staff Presenting Research Results at Scientific Meetings
Understanding and Analyzing Patterns in Life Expectancy for Zoo Animal Populations
Validating a Noninvasive Dermal Swabbing Method to Study Stress Hormones in the Critically Endangered Wyoming Toad
Visitor-Directed Behavior in Japanese Macaques and the Role of Rank
Zoo Biology Special Issue on Sustainability
ZooMonitor

MILLER PARK ZOO
Field Conservation
AZA FrogWatch USA
AZA Tiger SSP – Tiger Conservation Campaign – Sumatran Tiger and Prey Research
Eastern Box Turtle Conservation
Eastern Box Turtle Field Conservation
Parklands Foundation
Red Wolf Donation
Snow Leopard Trust (SLT)

PEORIA ZOO
Field Conservation
Alligator Snapping Turtle Recovery Plan
American Association of Zoo Keepers (AAZK) – Bowling for Rhinos
AZA FrogWatch USA
AZA Tiger SSP – Tiger Conservation Campaign
Center for Ecosystem Survival (SaveNature.Org)
Chopsticks For Salamanders (CFS)
Giraffe Conservation Foundation
Turtle Survival Alliance
Wild Aid
Xerces Society

Green Practices
GREEN PRACTICES IMPLEMENTED
Building Energy Management
Commingled Recycling
Composting (On-Site or Off-Site)
Smart Building Strategies

Research
Identify and Determine the Prevalence of Normal Gammaherpesvirus Flora in Eastern Black-and-White Colobus Monkeys (Colobus guereza) and Develop a qPCR Assay
Ontogenetic Relationship of Bite Force in Common Snapping (Chelydra serpentina) and Alligator Snapping Turtles (Macrochelys temminckii)
SCOVILL ZOO

Field Conservation
Cheetah Conservation Fund (CCF)
Conservation Centers for Species Survival (C2S2)
National Cheetah Coordinator Training Course
SaveNature.Org

Indiana

FORT WAYNE CHILDREN’S ZOO

Education
Amazing Animals/Animal Encounters
Animal Tales
Care-a-Van
Career Presentations
Community Events
Discovery Boxes
Dive Demonstration Chat
Education Interpreters
Job Shadow
Keeper Chats
Kids4Nature
Mini-Classes
Sea Lion Feeding Demonstration
Storytime
Summer Safari Day Camp
Teacher Workshops
Wild Nights
Zoo School
ZOOmobile
ZSI (Zoo Scientific Inquiry)
Z-Team Volunteer Program

Field Conservation
Acres Land Trust
AZA Conservation Grants Fund (CGF)
AZA SAFE – African Penguins

AZA Tiger SSP – Tiger Conservation Campaign – Sumatran Tiger
Coffee and Primate Conservation in Central Java
Giraffe Conservation Foundation (GCF)
Hellbender Headstarting Project
Hornbill Research Foundation (HRF)
Indiana University – Purdue University Fort Wayne (IPFW) Turtle Fund
IUCN/SSC Conservation Planning Specialist Group (CPSG)
Leatherback Trust
Lion Guardians
Little River Wetland Project
Mariana Avifauna Conservation (MAC) Project
Mitchell’s Satyr Butterfly Conservation
Motus Station Project
Orangutan Conservancy (OC)
Pacific Marine Mammal Rescue Center
Pan African Sanctuary Alliance (PASA)
Red Panda Network (RPN)
Sahara Conservation Fund (SCF) – Adopt-an-Ostrich Program
Save the Tasmanian Devil Program
Southern African Foundation for the Conservation of Coastal Birds (SANCCOB)
Sumatran Orangutan Conservation Programme (SOCP)
Thailand Clouded Leopard Consortium
Turtle Survival Alliance (TSA)
WildCats (Formerly ALTA)
Wildlife Conservation Society (WCS) – Sharks and Rays Conservation
World Parrot Trust (WPT)

Green Practices

FOOD
Sourced Local Food or Grew it On-Site

FUEL
Documented Amount Spent

GREEN PRACTICES IMPLEMENTED
Composting (On-Site or Off-Site)
WATER
Documented Amount Spent

Research
Blue River Water Quality Analysis 2018
Characterization of Reproductive Endocrinology in Female Serval
(Serval serval) for Improved Population Management
Evaluation of Algae Concentration and Species in Zoo Water Systems
Nutritional Analysis of Prey Commonly Consumed by the Eastern Hellbender
(Cryptobranchus alleganiensis alleganiensis)

INDIANAPOLIS ZOOLOGICAL SOCIETY, INC.

Education
Adult Education Programs
Animal Art Adventure
Animal Chats
Behind The Scenes Tours
Boy Scout Programs
Bunk for a Badge
Career Tours
Conservation Educator Academy
Daisy Scout Programs
Dolphin In-Water Adventure
Dolphin Presentation
Dolphin Trainer Explorer Camp
Education Kits
Educator E-News
Educator Open House
Educator Professional Development
Family Nature Center
Family Overnight
Girls in Science
Nocturnal Adventures
Oasis Senior Progaming
Preschool Programs
Saturday Science Programs
Science Investigator Series

Skype Chats
Summer Safari Overnight
Summer Zoo Camps
Zoo Educator Advisory Council
Zoo Explorer Camps

Field Conservation
Amur Tiger Conservation Project
AZA SAFE - Visionary Funder
Champions for our Planet
Cheetah Conservation in Namibia
Conservation International
Contribution to Support the Chair of the IUCN Species Survival Commission
Dian Fossey Gorilla Fund International
Educational Documentaries for Field Projects
Generation Conservation
Giraffe Conservation Foundation - Round Up for Conservation
Global Wildlife Conservation
Goualougo Triangle Ape Project (GTAP)
Indiana Stonefly Assessment for the Indiana Natural Heritage Data Center
Indianapolis Prize
Indianapolis Zoo Conservation Program Administration
Indonesian Vet Training Program
International Elephant Foundation (IEF)
Kutai National Park
Kutai National Park Reforestation
Macaw Recovery Network - Formerly Known as the Ara Project
Massasauga Rattlesnake Conservation
Migratory Bird Conservation
Northern Rangelands Trust: Hirola Recovery Project
Snow Leopard Conservancy
Sumatran Orangutan Conservation Programme (SOCP)
Tarangire Elephant Project (TEP) – Development of Corridors Outside of Tarangire National Park
The Nature Conservancy – Kankakee Sands Prairie Restoration
TSA Radiated Tortoise Confiscation Support
Wildlife Direct
World Parrot Trust (WPT)

Green Practices

ENERGY
Documented Amount Used
Purchased Renewable Energy

FOOD
Sourced Local Food or Grew it On-Site

FUEL
Documented Amount Spent
Documented Amount Used

GREEN PRACTICES IMPLEMENTED
Alternative Fuel Usage for On-Site Fleet
Building Energy Management
Commingled Recycling
Composting (On-Site or Off-Site)
Diverted or Recycled Construction Waste
Graywater Reuse and/or Rainwater Harvesting
Green Purchasing Policy/Green Procurement
Procured Local Food for On-Site Animals and/or Guest
Purchased Green Power or Renewable Energy Credits (RECs)
Smart Building Strategies
Stormwater Management Program
Wastewater Reduction
Waterwise Landscaping

WASTE
Documented Amount Recycled
Documented Amount Sent to Landfill

Research
Orangutan Mental Complexity and Its Relationship to Survival in the Tropical Forest

MESKER PARK ZOO & BOTANIC GARDEN

Education
Adventure Amazonia
Animal Play
Boo at the Zoo
Destination – Discovery!
Expedition – Zoo/Dr. Zoo
Mission Green Possible
New Docent Training
New ZooTeen Intake and Training
Party Animals!/ZooTopia
Spaceship Earth/Planet Rangers/S.A.F.E. Keepers
Zoo Master (Jr.)/Junior Zookeeper
Zoo Master/The Zookeeper’s Apprentice
Zoo Mission/Go Green!
Zoo Party
Zoo Play
Zoo Scientists/Expedition Zoo
ZooTeen Conferences (Spring & Fall)

Field Conservation
Action For Cheetahs in Kenya
AZA SAFE – Founders Circle
ChAG Chelonian Conservation Fund Donation
Friends of Laguna Atascosa NWR
Giraffe Conservation Foundation Donation
International Crane Foundation
LightHawk
Long-Term Monitoring of an Eastern Massasauga Rattlesnake (EMR) Population in Southwest Michigan
Ovate-Leaved Catchfly Conservation in Indiana
Proyecto Tití, Inc Donation
Save Vietnam’s Wildlife – Otter Enclosure
Snow Leopard Trust Donation
Tapir Specialist Group Conservation Fund
Wildlife Conservation Society (WCS) – 96 Elephants
Green Practices

ENERGY
Documented Amount Spent
Documented Amount Used

EXTERNAL SUPPORT
Received Support From External Sources for Green Projects

FOOD
Sourced Local Food or Grew it On-Site

FUEL
Documented Amount Spent
Documented Amount Used

GREEN CERTIFICATIONS
Certified by the Green Restaurant Association

GREEN PRACTICES IMPLEMENTED
Building Energy Management
Commingled Recycling
Composting (On-Site or Off-Site)
Graywater Reuse and/or Rainwater Harvesting
Smart Building Strategies
Stormwater Management Program
Waterwise Landscaping

WASTE
Documented Amount Composted

WATER
Documented Amount Spent
Documented Amount Used

Research
Application of Stem Cell Therapy in Sichuan Takin (Budorcas taxicolor) for the Treatment of Degenerative Joint Disease
Cuora maccordi Parentage DNA Testing
Pygmy Slow Dental Disease Project
Red Panda Amdoparvovirus Project
Takin Morbidity & Mortality Study

POTAWATOMI ZOO

Education
Conservation Scouts
Endangered Species Days
Evening Safari Programs

Field Conservation
Conservation Grant Fund – AZA
Madagascar Fauna and Flora Group
Okapi Conservation Project
Painted Dog Research Trust
Pangolin Conservation
Sahara Conservation Fund
Snow Leopard Trust (SLT)
Wildcat Conservation Alliance
Zoo Conservation Outreach Group (ZCOG)

Iowa

BLANK PARK ZOO

Field Conservation
Animal TB Research Group
AZA SAFE – African Penguin and Vaquita
AZA Tiger SSP – Tiger Conservation Campaign
AZA Zoo Park Partnership
Bioko Biodiversity Protection
Blank Park Zoo’s Stomp the Straw Campaign
Chimpanzee Sanctuary and Wildlife Conservation Trust
Conservation Fusion (CF)
Danau Girang Field Centre
Eco Cell Phone Recycling
Giraffe Conservation Foundation (GCF)
Health in Harmony
Hornbill Research Foundation (HRF) – Nest Adoptions in Thailand
International Rhino Foundation (IRF)
Iowa Hunters: Leading the Way
Iowa Rivers Revival
Green Purchasing Policy/Green Procurement
Procured Local Food for On-Site Animals and/or Guest
Stormwater Management Program
Wastewater Reduction
Waterwise Landscaping

PLANS, POLICIES, AND BUDGETS
Developed or Updated a Sustainability Plan (or Equivalent)

Research
Amyloidosis in Avian and Mammalian Species
Anesthesia in Zoos
Anesthetic Considerations in Pinnipeds
Anesthetic Monitoring: the Balance Between Awake and Dead
Behavior of the White Handed Gibbon, *Hylabates lar*
Behaviors and Social Interactions Among Japanese Macaques
Biomechanical Variables of the Foot in Normal Reticulated Giraffes (*Giraffa camelopardalis reticulata*)
Black Rhino Reproduction
Bone Mineral Density Determined by Densitometry Method (DXA) for Egyptian Fruit Bats (*Rousettus aegyptiacus*) in Human Care
Boot Wash: What is it Good for... Absolutely Nothing
Boy or Girl? – an Overview of the Neonatal Examination
Capture Myopathy
Case Series of Intraocular Neoplasia Diagnosed in California Sea Lions
Chilean Flamingo Reproduction: Clutch of 2018
Clostridial Infections in Zoo Animals
Conditions for Survival of Pathogens Commonly Affecting Zoo Animals
Connecting the Dots: A Case of Sudden Illness in a Macropod
Mob Boss
Crikey, You’ve Got Cataracts Mate!: An Overview of Cataracts in Wallabies
Decreasing Stereotypical Behaviors in Zoo Animals Through Enrichment
Do Egyptian Fruit Bats Drink Water?
Epidemiology of Lumpy Jaw in Captive Macropods
Ethogram Creation and Baseline Behavioral Time Budget of the Aldabra Tortoise
Exhibit Space Usage in Relation to Crowd Size in the Slender-Horned Gazelle
Extraskeletal Osteosarcoma in an Egyptian Fruit Bat (Rousettus aegyptiacus)
Giraffe Activity Budget in the New Barn
Hot or Not: Using Thermal Imaging for Pregnancy Detection
How Can You Mend a Broken Heart? The Basics and Treatment of Heart Disease
I Spy: The Reasons to Choose a Type of Imaging
Identification and Correlation of a Novel Siadenovirus in a Flock of Budgerigars (Melopsittacus undulates) Infected with Salmonella typhimurium in the U.S.
Immobilizing an Elk: A Case Study and Practical Guide
Indolent CD3+ T-Cell Lymphoma in an Amur Tiger (Panthera tigris)
Inflammatory Bowel Disease in Exotic Cats
Investigating Gate Lurking Behaviors in Reticulated Giraffes
I’ve Been Bitten! Now What?
Lesions of the Female Reproductive Tract in Japanese Macaque (Macacafuscata) of Two Captive Colonies
Lionfish Ethogram
Marburg Virus in Egyptian Fruit Bats
Monitoring the Behavioral, Spatial, and Social Preferences of Japanese Macaques
Mycobacteriosis: Clinical Presentation in Wallaby 2130
Never Make a RASH Decision: A Guide to Goat Dermatology
Nyala and Okapi Habitat Usage
Nyala and Okapi Space and time Management in a Multispecies Enclosure
Nyala Time Budget
Observing Centrochelys sulcata Behavior for Development Enrichment
Observing How Long Zoo Visitors Engage with Signage and How Interactive Elements Affect this Engagement
Outside the Admissions Area: the Unknown Routine Behaviors of the Bactrian Camels
Pain Management
Parasite Control in Zoos
Penguin Pathogens and Preventative Medicine
Phosphorus – What it Does and Why it’s Important
Positive Reinforcement Training in Zoo Medicine
Ratite Ethogram
Retrospective Evaluation of Non-Tuberculous Mycobacteriosis in a Captive Population of Red-Necked Wallabies
Reversible Anesthesia of North American River Otters (Lontra canadensis) With Dexmedetomidine-Butorphanol-Midazolam and Atipamezole-Naltrexone-Flumazenil
Seasonal Variation of 25-Hydroxy-Vitamin D in Two Captive Eastern Black Rhinoceros
Seasonal Variation of Serum 25-Hydroxy-Vitamin D in Two Captive Eastern Black Rhinoceros (Diceros bicornis michaeli) Housed in a North American Zoo
Seroprevalence of Leptospira spp., Toxoplasma gondii, & Dirofilaria immitis in Free-Roaming Cats in Iowa – Vector Borne & Zoonotic Diseases Volume XX, Number XX, 2018 a Mary Ann Liebert, Inc. DOI: 10
Skunks, Opossums, Raccoons, Oh My! The Role of Wildlife in Zoo Animal Disease
Space Use of Guineafowls in Relation to Elands and Ostriches
Squeezes & People & Boredom, Oh My! – A Look at Stress in Captive Animals
The Daily Movement of Blank Park Zoo’s Giraffe Heard
The Effect of Foraging Enrichment Pipes on the Behavior of Lontra Canadensis in a Zoological Setting
What is the Cognitive Ability of a Red Panda
Where’s Waldo? Pregnancy Diagnosis in Addax and Tamarins
Why Zoos Matter

NATIONAL MISSISSIPPI RIVER MUSEUM & AQUARIUM

Education

Camp
Classroom Program
Education Outreach
Guided Educational Tours
Live Animal Program
Overnight Program
Pioneer Days
RiverWorks Discovery
Student Environmental Conference
Student Led River Research Program (SLRRP)
Toddler Tuesday
Field Conservation
AZA Wyoming Toad SSP
Freshwater Mussel In-Situ Conservation
Good Neighbor Iowa
Plant, Grow, Fly.
Seafood Watch

Green Practices
ENERGY
Documented Amount Spent
Documented Amount Used

GREEN PRACTICES IMPLEMENTED
Commingled Recycling

WATER
Documented Amount Spent
Documented Amount Used

Research
AZA FrogWatch USA
Freshwater Mussel Propagation Research
Iowa Mussel Blitz
IOWATER Volunteer Water Monitoring Program Facilitator
Laotian Warty Newt Propagation
Sheltopusik Breeding Studies
Use of Carbon Dioxide to Prevent Biofouling by Dreissenid Mussels

Kansas

HUTCHINSON ZOO
Education
A Book & A Beast
Birthday Party Programs
Camps
Guided Tours
Outreach Programs

Field Conservation
Reintroduction and Monitoring of Black-Footed Ferrets in Logan County, Kansas

Green Practices
ENERGY
Documented Amount Spent

FUEL
Documented Amount Spent

GREEN PRACTICES IMPLEMENTED
Commingled Recycling

LEE RICHARDSON ZOO
Education
Adult & Senior Zoomobiles
Adult Distance Learning
Behind the Scenes Tour
Birthday Parties
Booths at Events
Discover Cart
Discovery Boxes
Education Center Programs for Non-School Groups
Education Center Programs for School Groups
Events
General Zoomobiles
Homeschool Programming
Keeper Talks
Non-School Youth Zoomobiles
School Distance Learning
School Zoomobiles
Story Time
Volunteer Training
Walking Tours
Zoo Edventures

Field Conservation
Anteaters and Highways
Butterfly Conservation
Crane Conservation
Field Monitoring Support for Kansas Black-Footed Ferret Reintroduction
Genotyping Captive Trumpeter Swans to See if They can Contribute to Rocky Mountain Population Restoration
Giraffe Conservation Status Project
International Elephant Foundation (IEF) – Protecting Elephants Through the Conservation Detection Dog Network
IUCN/SSC Conservation Planning Specialist Group (CPSG)
Management of the Lee Richardson Zoo Field Conservation Grant Program
Reticulated Giraffe Conservation With Pastoralists
Slow Loris Little Fireface Project
Snow Leopard Conservation
Turtle Survival Center

Green Practices
ENERGY
Documented Amount Spent
Documented Amount Used

FOOD
Sourced Local Food or Grew it On-Site

FUEL
Documented Amount Spent
Documented Amount Used

GREEN PRACTICES IMPLEMENTED
Building Energy Management
Composting (On-Site or Off-Site)

Diverted or Recycled Construction Waste
Procured Local Food for On-Site Animals and/or Guest
Waterwise Landscaping

PLANS, POLICIES, AND BUDGETS
Developed or Updated a Sustainability Plan (or Equivalent)

WASTE
Documented Amount Composted
Documented Amount Recycled

WATER
Documented Amount Used

Research
Assessing the Health of a Waterway by Assessing Presence of Macroinvertebrates
Assessment of Recovery of Testicular Function in Male Pallas’s Cats After Eight Years of Deslorelin Treatment
Institutional Animal Care and Use Committee (IACUC) Review of Proposed Research Projects

ROLLING HILLS ZOO
Field Conservation
Amphibian Ark
Association of Zoological Horticulture (AZH) – Conservation Grants
AZA Conservation Grants Fund (CGF)
Black-Footed Ferret (Mustela nigripes) Reintroduction Project in Kansas
Borneo Orangutan Survival Foundation (BOS)
Giraffe Conservation Foundation (GCF)
International Rhino Foundation (IRF)
IUCN/SSC Conservation Planning Specialist Group (CPSG)
Jane Goodall Institute
Milford Nature Center, Junction City, Kan.
Monarch Watch
Painted Dog Research Trust
Prairie Wildlife Research
Turtle Survival Center

Green Practices
ENERGY
Documented Amount Spent
Documented Amount Used

FOOD
Sourced Local Food or Grew it On-Site

FUEL
Documented Amount Spent
Documented Amount Used

GREEN PRACTICES IMPLEMENTED
Building Energy Management
Composting (On-Site or Off-Site)

Diverted or Recycled Construction Waste
Procured Local Food for On-Site Animals and/or Guest
Waterwise Landscaping

PLANS, POLICIES, AND BUDGETS
Developed or Updated a Sustainability Plan (or Equivalent)

WASTE
Documented Amount Composted
Documented Amount Recycled

WATER
Documented Amount Used

Research
Assessing the Health of a Waterway by Assessing Presence of Macroinvertebrates
Assessment of Recovery of Testicular Function in Male Pallas’s Cats After Eight Years of Deslorelin Treatment
Institutional Animal Care and Use Committee (IACUC) Review of Proposed Research Projects

ROLLING HILLS ZOO
Field Conservation
Amphibian Ark
Association of Zoological Horticulture (AZH) – Conservation Grants
AZA Conservation Grants Fund (CGF)
Black-Footed Ferret (Mustela nigripes) Reintroduction Project in Kansas
Borneo Orangutan Survival Foundation (BOS)
Giraffe Conservation Foundation (GCF)
International Rhino Foundation (IRF)
IUCN/SSC Conservation Planning Specialist Group (CPSG)
Jane Goodall Institute
Milford Nature Center, Junction City, Kan.
Monarch Watch
Painted Dog Research Trust
Prairie Wildlife Research
Turtle Survival Center

Green Practices
ENERGY
Documented Amount Spent
Documented Amount Used

FOOD
Sourced Local Food or Grew it On-Site

FUEL
Documented Amount Spent
Documented Amount Used

GREEN PRACTICES IMPLEMENTED
Building Energy Management
Composting (On-Site or Off-Site)
Green Practices

ENERGY
Documented Amount Spent
Documented Amount Used

FOOD
Sourced Local Food or Grew it On-Site

FUEL
Documented Amount Spent
Documented Amount Used

GREEN PRACTICES IMPLEMENTED
Composting (On-Site or Off-Site)
Procured Local Food for On-Site Animals and/or Guest

WATER
Documented Amount Spent
Documented Amount Used

SEDGWICK COUNTY ZOO

Education
Animal Tales Preschool
Senior Wednesday
Social Hours
Summer Classes
Zookeeper Apprentice Program

Field Conservation
Amphibian Ark
Amur Leopard and Tiger Alliance (ALTA)
AZA Ape TAG – Conservation Initiative
AZA Chacoan Peccary SSP
AZA Matschie’s Tree Kangaroo SSP - Tree Kangaroo Conservation Program, Papua New Guinea
AZA SAFE – Founders Circle
AZA SAFE – Giraffe
AZA Tiger SSP – Tiger Conservation Campaign/Initiative

Black-Footed Ferret Kansas Reintroduction Program
Caucasus Nature Fund – Zangeur Biosphere Complex
Center for American Burying Beetle Conservation
Crocodilian Advisory Group Fund
Dian Fossey Gorilla Fund International
Gorilla Rehabilitation and Conservation Education (GRACE) Center
International Iguana Foundation (IIF)
International Rhino Foundation (IRF)
IUCN/SSC Conservation Planning Specialist Group (CPSG)
Mariana Avifauna Conservation (MAC) Project
Ngwenya Rhino Fund
Okapi Conservation Project
Orangutan Information Centre
Painted Dog Conservation (PDC)
Painted Dog Research Trust
Red Panda Network (RPN)
Sahara Conservation Fund (SCF)
Save the Cassowary From Extinction in Australia/Rainforest Rescue/Project Rainforest
WildCare Institute: Center for Conservation (of the Humboldt Penguin) in Punta San Juan, Peru
WildCare Institute: Center for Conservation in Western Asia
WildCare Institute: Conservation of the Armenian Mountain Viper Inhabiting Human-Modified Landscapes
WildCare Institute: Grevy’s Zebra
Wildcare Institute: Ron Goellner Center for Hellbender Conservation

Green Practices

ENERGY
Documented Amount Spent
Documented Amount Used

FOOD
Sourced Local Food or Grew it On-Site

FUEL
Documented Amount Spent
Documented Amount Used
GREEN PRACTICES IMPLEMENTED
Commingled Recycling
Composting (On-Site or Off-Site)
Generated Solar or Wind Energy
Procured Local Food for On-Site Animals and/or Guest
Waterwise Landscaping

PLANS, POLICIES, AND BUDGETS
Dedicated a Line Item in the Budget for Green Practices

WASTE
Documented Amount Composted
Documented Amount Sent to Landfill

WATER
Documented Amount of Wastewater Generated
Documented Amount Spent
Documented Amount Used

Research
A Comprehensive Approach to Improve Management of an Endangered Wild Canid
Combining Ecological Research and Citizen Science to Develop the First Automated Face Recognition System for Brown Bears
Comparing Seasonal Vitamin D Levels in 1.2 Aldabra Tortoises
Comparison of Circulating Vitamin D (25OHD) in Captive North American and Free-ranging South African Black Rhinoceroses (Diceros bicornis spp.)
Endocrine Trajectories of Orangutan Male Secondary Sexual Development
Genetic and Phenotypic Characterization of Cystic Fibrosis Airway Disease in Non-Human Primates
Great Ape Neuroscience Project
Imported Elephant Welfare Initiative
Integration of Multi-Institutional Tumor Data in Exotic and Zoological Species for Characterization of Novel Cancer Models
Investigating the Genetic Basis for Inflammatory Bowel Disease in the Maned Wolf
Male Western Lowland Gorilla (Gorilla gorilla gorilla)
Hormonal Variation During Social Group Dissolution and Formation
Monitoring Body Condition, Reproductive, and Metabolic Hormones in African Elephants: Using Science to Aid Management Decisions to Optimize Health and Welfare of Zoo Elephants
Prevalence of Amdovirus in Red Pandas
Prevalence, Risk Factors, and Survival of Zoo Animals With Cancer

SUNSET ZOOLOGICAL PARK
Field Conservation
AZA Conservation Grants Fund (CGF)
AZA FrogWatch USA
Bug Safari Citizen Science Project
Friends of Sunset Zoo Conservation Scholar Program 2018-1
Friends of Sunset Zoo Conservation Scholar Program 2018-2
Friends of Sunset Zoo Conservation Scholar Program 2018-3
Honey Bee Conservation Project
Puerto Rican Crested Toad Breeding Facility
Wildlife SOS – Conservation Education Project
Zoo Conservation Outreach Group (ZCOG) - Wildlife Conservation and Education

Green Practices
ENERGY
Documented Amount Used
Generated Renewable Energy On-Site

GREEN PRACTICES IMPLEMENTED
Alternative Fuel Usage for On-Site Fleet
Commingled Recycling
Generated Solar or Wind Energy
Green Building Policy/Commitment
Stormwater Management Program
Wastewater Reduction
THE DAVID TRAYLOR ZOO OF EMPORIA

**Education**
- Animal Presentations/Classroom Brief Animal Encounters
- Birthday Parties
- Boo in the Zoo
- Care Home Visits
- Career Fair
- Docent in the Zoo
- Docent Meetings
- Docent Training
- Kidzoocation
- Lessons
- Open House
- Party for the Planet
- QR Code Project
- Safari Edventure
- Scout Programs
- Spring Forward
- Stroll and Show
- Summer Library Visits
- Zoo Camp
- Zoo Tours

**Field Conservation**
- Additional Pollinator Plantings
- AZA Conservation Grants Fund (CGF)
- Conservation Graphics
- IUCN/SSC Conservation Planning Specialist Group (CPSG)
- Monarch Waystations and Tagging
- National Wildlife Federation - Wildlife Habitat Certification
- Party for the Planet “Seed Bombs”
- Reintroduction of Black-Footed Ferrets in Kansas
- Species 360
- Symbolic Migration at Safari Edventure

**Green Practices**

**FOOD**
- Sourced Local Food or Grew it On-Site

**FUEL**
- Documented Amount Spent
- Documented Amount Used

**GREEN CERTIFICATIONS**
- Certified as a Wildlife Habitat

**GREEN PRACTICES IMPLEMENTED**
- Commingled Recycling
- Composting (On-Site or Off-Site)
- Diverted or Recycled Construction Waste
- Graywater Reuse and/or Rainwater Harvesting
- Stormwater Management Program
- Waterwise Landscaping

**PLANS, POLICIES, AND BUDGETS**
- Developed or Updated a Sustainability Plan (or Equivalent)

**WASTE**
- Documented Amount Recycled
- Documented Amount Sent to Landfill

**WATER**
- Documented Amount Spent
- Documented Amount Used

**Research**
- Black-Footed Ferret Survey
- Pronghorn Antelope Field Survey

**TOPEKA ZOO**

**Education**
- A Sense of Touch
- Animal Adaptations
- Animal and Their Young
- Animal Classifications
- Birds of Prey
- Body Coverings
- Bugs Bugs Bugs
- Career Talk
- Conservation Connection
Green Practices

ENERGY
Documented Amount Spent
Documented Amount Used
Generated Renewable Energy On-Site

GREEN PRACTICES IMPLEMENTED
Commingled Recycling
Composting (On-Site or Off-Site)
Diverted or Recycled Construction Waste
Generated Solar or Wind Energy
Green IT

Research
American Black Bears and Sun Bears – Bear TAG Survey
Constraints of Biomass on Innate Immunity Across Terrestrial Mammals
Identifying Hepatotoxicity From ACE Inhibitor Administration in Gorillas
Interactive Technology Use With Captive Great Apes
Oxytocin as a Measure of Social Bond and Welfare in Western Lowland Gorilla (Gorilla gorilla gorilla) in NA Zoos
Species and Sex Genetic Testing of Two-Toed Sloths (Choloepus spp.) in the SSP Programs

Kentucky

LOUISVILLE ZOOLOGICAL GARDEN
Field Conservation
Black-Footed Ferret Conservation Center
Dian Fossey Gorilla Fund International
FlutterFest
International Elephant Foundation (IEF)
Katie Adamson Conservation Fund
LuBee Bat Conservancy
Monarch Watch
Ornate Box Turtle Survey
Salt Creek Tiger Beetle Recovery Plan
Trumpeter Swan Reintroduction Program
Turtle Survival Alliance
Wildlife Conservation Society (WCS) – 96 Elephants
NEWPORT AQUARIUM

Education
Camp WAVE
Career Exploration Initiative: Job Shadow Programs
Community Development Contribution
Gills Club
Living Curriculum Initiative
Marine Biology and Conservation Lecture Series
Overnight Adventure Program
The Finstitute
WAVE on Wheels Outreach Program

Field Conservation
Aquarium Conservation Partnership (ACP)
Global Sea Turtle Conservation – North Carolina
River Sweep
SAVE LOCAL WATERs
Seafood Watch
WAVE Foundation

Green Practices
ENERGY
Documented Amount Used

FUEL
Documented Amount Spent
Documented Amount Used

PLANS, POLICIES, AND BUDGETS
Dedicated a Line Item in the Budget for Green Practices
Developed or Updated a Sustainability Plan (or Equivalent)
Developed or Updated a Sustainability Plan
Specified a Portion of the Amount Saved for Next Year’s Green Practices

WATER
Documented Amount Spent
Documented Amount Used

Research
Living Curriculum Initiative
Shark Research

Louisiana

AUDUBON AQUARIUM OF THE AMERICAS

Field Conservation
Gulf United for Lasting Fisheries (GULF)

Green Practices
GREEN PRACTICES IMPLEMENTED
Commingled Recycling
Community-Based Sustainability Projects
Procured Local Food for On-Site Animals and/or Guest
Water Submetering

Research
Conservation Wildlife Network (Formerly LMSSTRP)

AUDUBON NATURE INSTITUTE

Green Practices
GREEN PRACTICES IMPLEMENTED
Alternative Fuel Usage for On-Site Fleet
Green Building Policy/Commitment
Green IT
Green Purchasing Policy/Green Procurement

AUDUBON ZOO

Education
AZA FrogWatch USA
EarthFest
JR. KEEPERS
Self Guided Explorations
Sensory Sundays
Summer Camp
Swamp School/Jungle School
Field Conservation
Giraffe Conservation Foundation (GCF)
International Elephant Foundation (IEF)
International Iguana Foundation (IIF)
Malaysian Ape Conservation
Mariana Avifauna Conservation (MAC) Project
Turtle Survival Alliance (TSA)
Zoo Conservation Outreach Group (ZCOG)

Green Practices
ENERGY
Documented Amount Spent
Documented Amount Used

FUEL
Documented Amount Spent

GREEN CERTIFICATIONS
Certified as a Wildlife Habitat
Certified by the Green Restaurant Association

GREEN PRACTICES IMPLEMENTED
Alternative Fuel Usage for On-Site Fleet
Building Energy Management
Commingled Recycling
Community-Based Sustainability Projects
Completed Greenhouse Gas Inventory
Composting (On-Site or Off-Site)
Denitrification Systems On Ground
Diverted or Recycled Construction Waste
Energy Submetering
Generated Energy through Anaerobic Digester
Generated Solar or Wind Energy
Graywater Reuse and/or Rainwater Harvesting
Green Building Policy/Commitment
Green IT
Green Purchasing Policy/Green Procurement
Procured Local Food for On-Site Animals and/or Guest
Smart Building Strategies
Stormwater Management Program
Used Enterprise (IT) Solutions to Track and Measure Sustainability Performance
Used Environmental Management System
Wastewater Reduction
Water Submetering
Waterwise Landscaping

GREENHOUSE GAS EMISSIONS
Documented Amount of Greenhouse Gas Emissions

PLANS, POLICIES, AND BUDGETS
Developed or Updated a Sustainability Plan (or Equivalent)
Developed or Updated a Sustainability Plan

WATER
Documented Amount Spent

BREC’S BATON ROUGE ZOO
Green Practices

FREEPORT-MCMORAN AUDUBON SPECIES SURVIVAL CENTER
Field Conservation
Mississippi Sandhill Crane Propagation and Recovery Program
Proyecto Taguá/Chaco Center for Conservation and Research (CCCR)
Whooping Crane Recovery Program

Green Practices

GREEN PRACTICES IMPLEMENTED
Commingled Recycling
Denitrification Systems On Ground
Diverted or Recycled Construction Waste
Procured Local Food for On-Site Animals and/or Guest
Stormwater Management Program
Research
A Comparison of Nesting Material Preferences in Milky Storks (Mycteria cinerea)

PINOLA CONSERVANCY
Field Conservation
Pinola Conservancy Wetland and Migratory Bird Conservation Initiative

Maryland

NATIONAL AQUARIUM
Education
Aqua-Partners Schools
Aquarium on Wheels Youth Program
Free School Group Admission Program
Gills Club
Henry Hall Summer Camps
Middle School After School Program – All About Water
On-Site Classroom Programs
Outreach Programs
Summer Student Volunteers
Teacher Orientation
Teacher Training Workshops
Terrapins in the Classroom
Wetland Nursery
What Lives in the Harbor
Youth Ocean Conservation Summit – Baltimore

Green Practices
FOOD
Sourced Local Food or Grew it On-Site

FUEL
Documented Amount Spent
Documented Amount Used

GREEN CERTIFICATIONS
Certified as a Wildlife Habitat
One or More Buildings LEED-Certified by the US Green Building Council

GREEN PRACTICES IMPLEMENTED
Alternative Transportation Benefits for Staff
Building Energy Management
Commingled Recycling
Community Supported Agriculture (CSA) Program for Staff
Community-Based Sustainability Projects
Composting (On-Site or Off-Site)
Denitrification Systems On Ground
Diverted or Recycled Construction Waste
Graywater Reuse and/or Rainwater Harvesting
Green IT
Procured Local Food for On-Site Animals and/or Guest
Purchased Green Power or Renewable Energy Credits (RECs)
Stormwater Management Program
Wastewater Reduction
Waterwise Landscaping

National Oceanic and Atmospheric Administration (NOAA) – Apex Predator Program (APP) – Shark Tagging/Semen Collection for South-East Zoo Alliance for Reproduction and Conservation (SEZARC)
Sand Dune Restoration – Virginia
SaveNature.Org – Marine Conservation Meter
SaveNature.Org – Rainforest Conservation Parking Meter
Shoreline Restoration and Community Engagement at Masonville Cove
Urban Conservation and Community Engagement
Urban Conservation and Education Internship
Wildlife Habitat Gardening

Field Conservation
Animal Rescue
Atlantic White Cedar Restoration in Nassawango Creek Preserve, Maryland
Citizen Science: BioBlitz
Delaware Shorebird Project
Fort McHenry Tidal Wetland Restoration Project
Habitat Restoration
Marine Debris Prevention and Removal
Model Urban Waterfront

Research
A Comparison of Nesting Material Preferences in Milky Storks (Mycteria cinerea)
PLANS, POLICIES, AND BUDGETS
Dedicated a Line Item in the Budget for Green Practices

WASTE
Documented Amount Recycled
Documented Amount Sent to Landfill

Research
Assessment of Visual Laterality in Bottlenose Dolphins (Tursiops truncatus) During Touchscreen Sessions and During Peephole Sessions
Controlled Environmental Testing for an Integrated Genomics Platform for Temporal Analysis of Marine Biodiversity
Dolphin Blowhole Oil Droplet Study
Dolphin Genomics Study
Dolphin Touchscreen Study
Environmental Impact Statement Patuxent River
Hormonally-Induced Oviposition in the Smooth-Sided Toad (Rhaebo guttatus)
Identifying and Understanding Parasitic Nematode Infections in Marine Mammals
Interspecific Variation of Cutaneous Water Loss (CWL) Among Reptiles and Amphibians
Northeast Region Sea Turtle Sampling Protocol

SALISBURY ZOOLOGICAL PARK
Field Conservation
Andean Bear Conservation Partnership

THE MARYLAND ZOO IN BALTIMORE
Education
Adult Summer Camp
Animal Ambassador Encounters
Animal Craft Safari
Art Class Outreach
Community Event Programs
Conservation Conversation
Exploration Stations
Field Talks
Field Trips (Self-Guided)
Guided Zoo Tours
Kids in Kayaks Partnership
On-Site Interpretation
Partner Package
Pediatric Hospital Outreach
Penguin Feeding Talks
Pop-Up Labs
Puppet Shows
Sip and Stroll
Special Interest Workshop
Storytime With the Zoo
Stroller Safari
Summer Camp
Superkids
Walks on the Wild Side
Zoo Introduction
Zoo Snooze Overnight
ZOOlams
ZOOMobile

Field Conservation
Adkins Arboretum
AZA Conservation Grants Fund (CGF)
AZA HAZWOPER Training
AZA SAFE – African Penguin Disaster Response
AZA SAFE – African Penguin SSP Sustainability Project
Bluebird Nest Project
Brown Pelican Banding and Health Survey
Cheetah Conservation Fund (CCF)
Crocodilian Conservation Center of Florida
Elephants for Africa
Goualougo Triangle Ape Project (GTAP)
Health and Ecology Survey of Maryland Black Bear Sows and Cubs (Ursus americanus)
Comparison of a Dry Powder vs a Complete Gel Diet Over Time in House Cricket Nymphs (Acheta domesticus)

Ecology and Health Study of Free-Ranging Eastern Box Turtles Within the Grounds of The Maryland Zoo in Baltimore

Effect of Dietary Shifts on the Microbiome of African Savannah Herbivores

Exogenous Hormone Induction of Oviposition in Gravid Panamanian Golden Frogs (Atelopus zeteki)

Health Surveillance of Free-Ranging Raccoons (Procyon lotor) and Red Foxes (Vulpes vulpes) on the Grounds of The Maryland Zoo in Baltimore

Improvement of the Diagnosis of Aspergillosis in Penguins

Interspecific Variation of Cutaneous Water Loss (CWL) Among Reptiles and Amphibians

Malaria Pathogen Amplification and Gene Sequencing

Pharmacokinetics of Antimalarial Primaquine in African Penguins

STEM Matters: Investigating a Confluence of Visitors and Institutional Agendas

Use of Herbal Supplements to Decrease Anxiety in an Adult Female Chimpanzee (Pan troglodytes)

Massachusetts

BUTTONWOOD PARK ZOO

Education

Animal Ambassador Encounters

Bear Cub Club

Boo at the Zoo

Creature Creations

Education Volunteers

Elephant Appreciation Day

Endangered Species Day

FrogWatch USA Training

Keeper Chats

Overnight Programs

Party for the Planet

Puddle Jumpers

School Programs

Science On a Sphere
Field Conservation
Elephant Care International
Genetic Analysis of the US Population of Baer’s Pochard (Aythya baeri) for Improved Captive Management
Grow Trees for Golden Lion Tamarins
Proyecto Titi
The Muriqui Project of Caratinga

Green Practices
ENERGY
Documented Amount Used

GREEN PRACTICES IMPLEMENTED
Composting (On-Site or Off-Site)
Green Purchasing Policy/Green Procurement

WASTE
Documented Amount Composted
Documented Amount Recycled
Documented Amount Sent to Landfill

WATER
Documented Amount Used

Research
A Review of Asian and African Elephant Gastrointestinal Anatomy, Physiology, and Pharmacology
Clinical Management of a Complete Gastrointestinal Obstruction and Ileus in a Geriatric Female Asian Elephant (Elephas maximus)

CAPRON PARK ZOO
Field Conservation
Red Panda Network

Research
Genomic Investigation of Cardiomyopathy in Meerkats

FRANKLIN PARK ZOO
Green Practices
ENERGY
Documented Amount Spent
Documented Amount Used

EXTERNAL SUPPORT
Received Support From External Sources for Green Projects

FOOD
Sourced Local Food or Grew it On-Site

FUEL
Documented Amount Used

GREEN PRACTICES IMPLEMENTED
Composting (On-Site or Off-Site)
Green Purchasing Policy/Green Procurement

WASTE
Documented Amount Composted
Documented Amount Recycled
Documented Amount Sent to Landfill

WATER
Documented Amount Used

Research
A Review of Asian and African Elephant Gastrointestinal Anatomy, Physiology, and Pharmacology
Clinical Management of a Complete Gastrointestinal Obstruction and Ileus in a Geriatric Female Asian Elephant (Elephas maximus)
MUSEUM OF SCIENCE

Education
- Animal Habitats
- Butterfly Garden Experience
- Charles River Field Station
- Eye Opener Behind the Scene at the Live Animal Center
- IMAX Film
- Life Cycles
- Live Animal Presentations
- Meet The Curator
- Overnight Field Trips
- Traveling Programs – Animal Invaders

Field Conservation
- Karner Blue Butterfly Restoration Project
- Northern Red-Bellied Cooter (Pseudemys rubriventris)
  - Headstart Program

Green Practices

GREEN PRACTICES IMPLEMENTED
- Building Energy Management
- Composting (On-Site or Off-Site)
- Diverted or Recycled Construction Waste
- Generated Solar or Wind Energy

PLANS, POLICIES, AND BUDGETS
- Developed or Updated a Sustainability Plan (or Equivalent)
- Developed or Updated a Sustainability Plan

WASTE
- Documented Amount Composted
- Documented Amount Recycled
- Documented Amount Sent to Landfill

Research
- Designing for Productive Struggle

NEW ENGLAND AQUARIUM

Education
- Aquarium Teen Internship Program
- Behind the Scenes Tours
- Harbor Discoveries Summer Camp
- Interpretation
- Live Blue Ambassadors
- Live Blue™ Service Initiative
- Marine Biologists in Training
- National Network for Ocean and Climate Change Interpretation
- Public Programs
- Student Programs
- Teacher Services
- Visualizing Change

Field Conservation
- Conservation Medicine Program
- Consortium for Wildlife Bycatch Reduction
- Marine Conservation Action Fund
- Marine Spatial Planning
- Right Whale Research Project
- Sea Turtle Conservation and Research
- Sustainable Aquaculture
- Sustainable Ornamental Fish Initiative
- Sustainable Seafood Programs

Green Practices

ENERGY
- Documented Amount Spent
- Documented Amount Used
- Purchased Renewable Energy

EXTERNAL SUPPORT
- Received Support From External Sources for Green Projects

FUEL
- Documented Amount Spent
GREEN PRACTICES IMPLEMENTED
Alternative Transportation Benefits for Staff
Alternative Transportation Discounts for Guests
Building Energy Management
Commingled Recycling
Community Supported Agriculture (CSA) Program for Staff
Completed Greenhouse Gas Inventory
Composting (On-Site or Off-Site)
Diverted or Recycled Construction Waste
Generated Solar or Wind Energy
Green IT
Green Purchasing Policy/Green Procurement
Purchased Green Power or Renewable Energy Credits (RECs)

GREENHOUSE GAS EMISSIONS
Documented Amount of Greenhouse Gas Emissions

PLANS, POLICIES, AND BUDGETS
Dedicated a Line Item in the Budget for Green Practices

WASTE
Documented Amount Composted
Documented Amount Recycled
Documented Amount Sent to Landfill

WATER
Documented Amount Spent
Documented Amount Used

Research
Elasmobranch Mortality and Stress Physiology
Marine Stress Research
National Network for Ocean and Climate Change Interpretation (NNOCCI) – Research and Evaluation
Research Support: Administration
Research Support: Administration Overhead
Research Support: Animal Care and Use Committee (ACUC)

WALTER D. STONE MEMORIAL ZOO
Green Practices
ENERGY
Documented Amount Spent
Documented Amount Used

FOOD
Sourced Local Food or Grew it On-Site

FUEL
Documented Amount Spent
Documented Amount Used

GREEN PRACTICES IMPLEMENTED
Building Energy Management
Commingled Recycling
Composting (On-Site or Off-Site)
Procured Local Food for On-Site Animals and/or Guest

PLANS, POLICIES, AND BUDGETS
Dedicated a Line Item in the Budget for Green Practices
Developed or Updated a Sustainability Plan

WASTE
Documented Amount Composted
Documented Amount Recycled
Documented Amount Sent to Landfill

WATER
Documented Amount Spent
Documented Amount Used

ZOO NEW ENGLAND
Field Conservation
Anteaters and Highways
AZA Ape TAG – Conservation Initiative
AZA Wildlife Trafficking Alliance
Bat Conservation International (BCI)
Blanding’s Turtle Conservation, Management, and Education
Blue-Spotted Salamander Population Assessment
Eastern Box Turtle Conservation and Management
Eastern Spadefoot Toad Reintroduction
Giraffe Conservation Foundation
Gorilla Rehabilitation and Conservation Education (GRACE) Center
Hicatee Turtle Conservation With BFREE
International Giraffe Day
Jaguar Cockscomb Wildlife Sanctuary
Lowland Tapir Conservation Initiative
Marbled Salamander Conservation and Management
New England Blazing Star and Other Rare Wildflower Conservation
Panama Amphibian Rescue and Conservation (PARC)
Pangolin Conservation
Peregrine Fund
Pollinator Partnership
Snapping Turtle Education Program
Snow Leopard Trust (SLT)
Spotted Turtle Conservation and Management
Wood Frog Headstarting and Education Program
Wood Turtle Conservation and Management

**Green Practices**

**GREEN PRACTICES IMPLEMENTED**

- Commingled Recycling
- Composting (On-Site or Off-Site)

**Research**

Addendum to: Oxytocin as a Measure of Social Bond and Welfare in Western Lowland Gorillas (*Gorilla gorilla gorilla*) in North American Zoos
Assessment of Basal Seminal Traits and Semen Cryopreservation in the Canada Lynx (*Lynx canadensis*)
Collection Stewardship of Endangered Small Wild Felids
Developing New Tools for Integrating DNA Data Into AZA Breeding Programs
Drinking Water Quality and Water Husbandry in AZA Zoos
Fecal Survey of Red Panda SSP Population for Amdoparvovirus
Generation and Characterization of an Immortalized Erythroid Progenitor Cell Line From Western Lowland Gorilla Peripheral Blood

Nonhuman Primate Lymphocryptoviruses
Tapir Baby Photo Database for *In-Situ* Field Researchers

**Michigan**

**BINDER PARK ZOO**

**Education**

- BIG Zoo Lesson
- Birthday Parties
- Critter Encounters and Biofacts
- Family Slumber Party
- FAWN Playgroup
- Overnight Safari
- Safari Day Camps
- Wild Encounters
- Wild Walks
- Zoo Snooze
- Zoomobile

**Field Conservation**

Action for Cheetahs in Kenya
Adopt-A-Beach
American Association of Zoo Keepers (AAZK) – Bowling for Rhinos
Amphibian Conservation Project
AZA SAFE – Cheetah
Butterfly Monitoring
Giraffe Conservation Foundation
Piping Plover Patrol and Recovery Program
Snow Leopard Trust (SLT)

**Green Practices**

**ENERGY**

Documented Amount Spent
Documented Amount Used

**FOOD**

Sourced Local Food or Grew it On-Site
FUEL
Documented Amount Spent
Documented Amount Used

GREEN PRACTICES IMPLEMENTED
Commingled Recycling
Composting (On-Site or Off-Site)
Diverted or Recycled Construction Waste

Research
A Comprehensive Approach to Improve Management in an Endangered Wild Canid

DETROIT ZOO

Education
Adult Programs
After School Programs
Family Fun Fridays
Hospital Programs
Humane Education Horticulture Program
Learning Labs
Nature Tots
Outreach
Professional Development
School District Partnerships
Scout Program
Volunteer Activities
Wild About Animal Days
Zoo Tots
Zoo Tots II
Zookeeper Camps

Field Conservation
African Elephant Conservation Trust
American Association of Zoo Keepers (AAZK) – Bowling for Rhinos
American Beaver Project
American Marten Management Project
Amphibians in Peru
Amur Tiger Conservation
Animals Asia
Ape Action Africa
Armenian Brown Bear-Human Conflict Mitigation
Armenian Otter Conservation
Armenian Viper Project
AZA Ape TAG – Conservation Initiative
AZA Avian Scientific Advisory Group (ASAG)
AZA Conservation Grants Fund (CGF)
AZA Dusky Gopher Frog SSP – Reintroduction Project
AZA Eastern Massasauga Rattlesnake SSP
AZA FrogWatch USA
AZA Panamanian Golden Frog SSP
AZA Puerto Rican Crested Toad SSP
AZA Wyoming Toad SSP
Bat Conservation International (BCI)
Bird Strike Prevention at the Detroit Zoo
Black Crowned Night Herons
Blanding’s Turtle Headstart Project
Blue Spotted Salamanders
Common Tern Nesting Habitat Restoration in the Detroit River and Lake St. Clair
Conservación de la Naturaleza Amazónica del Perú (CONAPAC)
Conservation International – Amphibian Survival Alliance
Conservation Staff Labor
Craig Packer Lion Conservation Project
Cryptobranchid Interest Group
Eastern Massasauga Rattlesnake Field Survey
Falkland Island Conservation
Giraffe Conservation Foundation (GCF)
Gorilla Doctors
Gorilla Rehabilitation and Conservation Education (GRACE) Center
Great Lakes Colonial Waterbird Monitoring
Great Lakes Piping Plover Salvage Captive Rearing
Grevy’s Zebra Trust
Hanzaki Institute – Japanese Giant Salamander Conservation
Hawkwatch International
Honduras Amphibian Rescue and Conservation Center (HARCC)
Isle Royale Wolf Study
IUCN Red List of Threatened Species
IUCN/SSC Conservation Planning Specialist Group (CPSG)
IUCN/SSC Flamingo Specialist Group
IUCN/SSC Penguin Specialist Group
Jane Goodall Institute
Jane Goodall Institute – Nepal
Kirtland’s Warbler Initiative
Lao Conservation Trust for Wildlife
Lion Conservation, West Africa
Mad Dog Initiative (MDI)
Michigan Bird Conservation Initiative
Mudpuppy Monitoring
Ngogo Chimpanzee Project
Osprey Management in Southeast Michigan
Ostrich Specialist Group
Pan African Sanctuary Alliance (PASA)
Pandrillus Foundation
Partula Field Program Consortium
Penguin Sentinels
Peregrine Monitoring
Peru Adopt-A-School
Polar Bear and Grizzly Resource Overlap in Kaktovik, Alaska
Polar Oceans Research Group
Pollinator Conservation
Rainforest Trust
Red Panda Network (RPN)
Science and Conservation Centre
Snares to Wares, Lion Conservation
Snow Leopard Conservation in Nepal and China
Snow Leopard Trust (SLT)
Striped Newt Conservation
The Ocean Project
The Peregrine Fund
The Think Tank for Kangaroos (THINKK) of the University of Technology Sydney Center for Compassionate Conservation
Tree Kangaroo Conservation Program
Turtle Survival Alliance (TSA)
Urban Bird Treaty
Urban Ecology of Bats
VulPro
Wild Camel Protection Foundation (WCPF)
Wildlife Conservation Network (WCN) – Ewaso Lions
Wildlife Conservation Society (WCS) – Shark Campaign
Wildlife SOS
World Conservation Monitoring Center (WCMC)
Wyoming Toad Survey

Green Practices

ENERGY
Documented Amount Spent
Documented Amount Used
Generated Renewable Energy On-Site
Purchased Renewable Energy

EXTERNAL SUPPORT
Received Support From External Sources for Green Projects

FOOD
Sourced Local Food or Grew it On-Site

FUEL
Documented Amount Spent
Documented Amount Used

GREEN CERTIFICATIONS
Certified as a Wildlife Habitat
Certified by the Green Restaurant Association

GREEN PRACTICES IMPLEMENTED
Alternative Fuel Usage for On-Site Fleet
Building Energy Management
Commingled Recycling
Community-Based Sustainability Projects
Composting (On-Site or Off-Site)
Energy Submetering
Graywater Reuse and/or Rainwater Harvesting
Green Building Policy/Commitment
Great Ape Heart Project
Holtzman Wildlife Foundation Red Panda Forest Post-Occupancy Evaluation
Personality in Blanding’s Turtles
Survey of Ocular Health and Pathology in Two Populations of Captive Panamanian Golden Frogs (*Atelopus zeteki*)
The Effects of a New, More Complex Habitat on Indicators of Welfare in Penguins at the Detroit Zoo
The Effects of Foraging Opportunities on the Activity Levels of Geriatric Chimpanzees (*Pan troglodytes*)
The Efficacy of Enrichment Items for Eliciting Foraging and Feeding Behaviors in Seals Living in the Care of Humans
The Impact of Browse Availability on the Behavior and Hormones of Captive Gorillas
The Impact of Visitor and Keeper Presence on the Welfare of Captive Southern White Rhinoceros at the Detroit Zoo
Ultrasound Measurement of Yolk Sac Dimension and Appearance as Predictors of Yolk Sac Retention and Infection in the Penguin Chick
Underwater Behavior of Gentoo (*Pygoscelis papua*) Penguins
Validating Infrared Thermography as a Tool to Assess the Impact of Human-Animal Interactions
Welfare Assessment of Five Juvenile Madagascar Giant Hognose Snakes (*Leioheterodon madagascariensis*) During a Habitat Modification
Wyoming Toad Habitat Choice

JOHN BALL ZOO

Education
AZA FrogWatch USA
Behind the Scenes Tours
Keeper for a Half Day and Job Shadows
Kids’ Night Out
Overnight Adventures
Scout Programs
Sprouts
STEM Classes
Teen Volunteer Program
Traveling Zoo
Twilight Tours
Wild Encounters
Zoo Camp
Zoo Explorers
Zoo Lab

**Field Conservation**

AZA SAFE
AZA Tiger SSP – Tiger Conservation Campaign
Conservation of the Endemic Chelonians of Sulawesi: Foresten’s Tortoise and Sulawesi Forest Turtle
Eastern Massasauga Rattlesnake Longitudinal and DNA Study
Great Lakes Piping Plover Recovery Effort
Inspiring Community for Wildlife Conservation
John Ball Zoo Turtle Population Monitoring Project
Lake Sturgeon Conservation
Limbe Wildlife Centre
Limbe Wildlife Centre Green Leaf Project
Monarch Butterfly Raise and Release Program
Preserving *Hesperapis oraria* (Gulf Coast Bee) Through Better Food Security
Preventing the Transference of the Fatal Canine Distemper Virus (CDV) to African Wild Dog Around the Okavango Delta
Primate Care Training Program
Red Panda Network (RPN)
Tsavo Cheetah Project
Wood Turtle Headstarting Project

**Green Practices**

**ENERGY**
Documented Amount Spent
Documented Amount Used

**FOOD**
Sourced Local Food or Grew it On-Site

**FUEL**
Documented Amount Spent

**GREEN PRACTICES IMPLEMENTED**
Building Energy Management
Commingled Recycling
Composting (On-Site or Off-Site)
Diverted or Recycled Construction Waste

Energy Submetering
Smart Building Strategies
Water Submetering

**WASTE**
Documented Amount Composted
Documented Amount Recycled
Documented Amount Sent to Landfill

**WATER**
Documented Amount Spent
Documented Amount Used

**POTTER PARK ZOOLOGICAL GARDENS**

**Education**
Animal Science and Zoo Management High School Class
Arbor Day
AZA FrogWatch USA
BIG Zoo Lesson
College and University Lectures
Conservation Talks
Earth Day Celebration at the Capitol
Encounters
FALCONERS
Michigan Bat Festival
Nights at the Living Museum
One Day Extended Learning
Outreach Program
Outreach Station
Overnight Experiences
Party for the Planet
Red Panda Day
Scout Badge Workshops
Summer Camp
Tours
Two at the Zoo
World Migratory Bird Day
World Rhino Day
Zoo In Your Neighborhood
**Field Conservation**

- American Association of Zoo Keepers (AAZK) – Bowling for Rhinos
- AZA FrogWatch USA
- AZA Puerto Rican Crested Toad SSP
- AZA SAFE – Vaquita
- Eastern Massasauga Rattlesnake Field Study
- Great Lakes Piping Plover Management and Restoration
- Guam Kingfisher SSP – Breeding/Reintroduction
- Least Shrew Field Research Project
- Michigan Wildlife Conservancy
- Quarters for Conservation
- Red Panda Day
- World Rhino Day

**Green Practices**

**GREEN PRACTICES IMPLEMENTED**

- Commingled Recycling
- Green IT
- Smart Building Strategies
- Waterwise Landscaping

**Research**

- Behavioral and Biological Reasons for Unsuccessful Breeding in Black Rhinos: Olfactory Stimulation as a Method for Improvement

**SAGINAW CHILDREN’S ZOO**

**Education**

- Behind the Scenes Tours
- E-Newsletter
- Exhibit Interpretation
- Hatchlings
- Living Learning Lab
- Lunch and Learn
- Outreach
- Palm Oil Handout
- Party for the Planet
- Rainforest Brochure
- Samaritas After School Program
- SaveNature.Org Pamphlet
- Seafood Watch Pocket Guide & Interpretation
- Zoo Camp

**Field Conservation**

- Adopt-A-Highway
- AZA Conservation Grants Fund (CGF) – Silent Auction
- AZA Cotton-Top Tamarin SSP
- AZA Mexican Wolf SSP
- AZA SAFE
- Citizen Bat League
- Citizen Science Training
- Great Lakes Piping Plovers
- Hingeback Tortoise Headstart Project
- Invasive Species Removal
- Kirtland’s Warbler Alliance
- Kirtland’s Warbler Jack Pine Planting
- Lake Sturgeon Recovery
- Michigan Frog and Toad Survey
- Mr. Ellie Pooh
- Proyecto Tití
- Saginaw River Clean-up
- Samaritas Community Center After School Program
- SANCCOB Animal Professional Exchange
- Sandhill Crane Population Survey
- SaveNature.Org
- Seafood Watch Visitor Cart
- Snow Leopard Trust
- Southern African Foundation for the Conservation of Coastal Birds (SANCCOB)
- Wood Duck Nests at Discovery Preserve
- World Oceans Day
- Zoo Brown Bag Lunch Series

**Green Practices**

**ENERGY**

- Documented Amount Spent
- Documented Amount Used
EXTERNAL SUPPORT
Received Support From External Sources for Green Projects

FOOD
Sourced Local Food or Grew it On-Site

FUEL
Documented Amount Spent
Documented Amount Used

GREEN PRACTICES IMPLEMENTED
Commingled Recycling
Composting (On-Site or Off-Site)
Diverted or Recycled Construction Waste
Graywater Reuse and/or Rainwater Harvesting
Green IT
Procured Local Food for On-Site Animals and/or Guest

WATER
Documented Amount Spent
Documented Amount Used

School and Group
Scouting Programs
Storytime

Field Conservation
Audubon Society’s Project Puffin
AZA Orangutan SSP – Field Initiative Program
AZA Wyoming Toad SSP – Master Plan Meeting and Fieldwork
Biosphere Expeditions Snow Leopard Survey in Kyrgyzstan
Channel Islands Marine and Wildlife Institute
Mariana Avifauna Conservation Project Through Pacific Bird Conservation
Mississippi Gopher Frog Breeding Project
Polar Bears International (PBI)
SAFE Orangutan
Seafood Watch
Sloth Conservation in Costa Rica
Snow Leopard Trust (SLT)
Tropical Ecology of Costa Rica
Wild Nature Institute

Minnesota

COMO PARK ZOO AND CONSERVATORY

Education
After School Program
Animal Ambassadors
Animal Demo/Training
AuSM (Autism Society of Minnesota)
Birthday Parties
Camp Como
Discovery Series
Early Childhood Programs
Free Educational Events
Gardener Talks
Group Tours
Interpretive Interactive
Keeper Talk
Residency Program

Green Practices

ENERGY
Documented Amount Used
Generated Renewable Energy On-Site

FOOD
Sourced Local Food or Grew it On-Site

FUEL
Documented Amount Spent
Documented Amount Used

GREEN PRACTICES IMPLEMENTED
Building Energy Management
Commingled Recycling
Community Supported Agriculture (CSA) Program for Staff
Community-Based Sustainability Projects
Composting (On-Site or Off-Site)
Energy Submetering
Generated Solar or Wind Energy
Graywater Reuse and/or Rainwater Harvesting
Green IT
Green Purchasing Policy/Green Procurement
Procured Local Food for On-Site Animals and/or Guest
Purchased Carbon Offset(s) for On-Site Utility Use
Smart Building Strategies
Stormwater Management Program
Water Submetering
Waterwise Landscaping

PLANS, POLICIES, AND BUDGETS
Developed or Updated a Sustainability Plan (or Equivalent)

WASTE
Documented Amount Sent to Landfill

WATER
Documented Amount Used

Research
Germplasm Project With Omaha’s Henry Doorly Zoo and Aquarium
Giraffe Welfare Project
Gonadal Rescue Project With Omaha’s Henry Doorly Zoo and Aquarium

LAKE SUPERIOR ZOO
Education
Behind-the-Scenes Tours
Birthday Party Animal Encounters
Docent Animal Encounters
Family Programs
Homeschool Classes
Interpretive Carts
Job Shadowing Programs
Keeper Talks
Outreach Programs
Overnight Programs
Preschool Classes
School Group Programs

School Kits
Summer Day Camps
Toddler Classes
Volunteer Continuing Education
Winter Camps
Zoo Crew Summer Teen Program

Field Conservation
AZA Felid TAG
Bat Conservation International (BCI)
Big Island Resource Conservation and Development Council
Mexican Wolf SSP
Proyecto Tití
Snow Leopard Trust (SLT)
The Peregrine Fund
Turtle Survival Alliance

Green Practices

ENERGY
Documented Amount Spent
Documented Amount Used
Generated Renewable Energy On-Site

FOOD
Sourced Local Food or Grew it On-Site

GREEN PRACTICES IMPLEMENTED

WASTE
Documented Amount Sent to Landfill

WATER
Documented Amount Used

Research

LAKE SUPERIOR ZOO
Education

MINNESOTA ZOOLOGICAL GARDEN
Field Conservation
Amur Leopard and Tiger Alliance (ALTA)
AZA SAFE
AZA SAFE – African Penguins
AZA Tiger SSP – Tiger Conservation Campaign
Bird Window Collision Conservation Research
PLANS, POLICIES, AND BUDGETS
Dedicated a Line Item in the Budget for Green Practices
Developed or Updated a Sustainability Plan (or Equivalent)
Developed or Updated a Sustainability Plan

Research
Asian Wild Horse Anesthesia Study
Development of a Genome Resource Bank and Transcervical Insemination for the Genetic Management of Tigers
Dolphin Demographic Parameters in Captivity and in the Wild
Epidemiology of *Trueperella pyogenes* Infection in Pronghorn Antelope
Evaluating the Effects of Enrichment Treatments on Behavior of Animals at the Minnesota Zoo
Genetic Values of Possible Parents With Analysis of Pedigrees That Contain MULT Groups
IUCN Red Listing for Butterflies
Reproductive Biology of Canada Lynx

Missouri

DICKERSON PARK ZOO

Field Conservation
Action for Cheetahs in Kenya
American Association of Zoo Keepers (AAZK) – Bowling for Rhinos
AZA Conservation Grants Fund (CGF)
AZA Tiger SSP – Tiger Conservation Campaign
Cheetah Conservation Fund (CCF)
Dian Fossey Gorilla Fund International
Dong Phayayen-Khao Yai Carnivore Conservation Project
Giraffe Conservation Foundation (GCF)
International Bongo Foundation
International Crane Foundation (ICF)
IUCN/SSC Conservation Planning Specialist Group (CPSG)
Madagascar Fauna and Flora Group (MFG)
Niassa Carnivore Project
Proyecto Taguá/Chaco Center for Conservation and Research (CCCR)
Proyecto Tití – Conserving the Critically Endangered Cotton-Top Tamarin in Colombia

Green Practices

GREEN CERTIFICATIONS
One or More Buildings LEED-Certified by the US Green Building Council

GREEN PRACTICES IMPLEMENTED
Alternative Fuel Usage for On-Site Fleet
Alternative Transportation Discounts for Guests
Commingled Recycling
Composting (On-Site or Off-Site)
Diverted or Recycled Construction Waste
Green IT
Green Purchasing Policy/Green Procurement
Waterwise Landscaping

Bison Recovery – Minnesota
Black Rhino Conservation – Namibia
Coral Reef Restoration
Dhole Field Conservation
Freshwater Mussel Conservation
Hartmann’s Mountain Zebra Conservation
Hawaiian Monk Seal Conservation
Invest in the Nest – African Penguin Conservation
In-Water and Nesting Beach Conservation of Marine Turtles
IUCN/SSC Conservation Planning Specialist Group (CPSG)
Macaw Conservation
Malayan Tapir Conservation
Minnesota Turtle Conservation
Moose Conservation Research: Minnesota
Prairie Butterfly Conservation: Minnesota
Przewalski’s Horse Conservation in China and Mongolia
Recycle for Rainforests
Reducing Bear-Human Conflict
Rusty-Patched Bumble Bee Research and Conservation
Save the Wild Chinchillas
Sea Otter Conservation
Ulysses S. Seal Conservation Grant Program
Raptor Rehabilitation

Sahara Conservation Fund (SCF) – Adopt-an-Ostrich Program

Save the Golden Lion Tamarin

SaveNature.Org

The Katie Adamson Conservation Fund

Turtle Survival Alliance (TSA)

Wildlife Conservation Society (WCS) – Grizzly Bear Conservation in the United States/96 Elephants

Zoo Conservation Outreach Group (ZCOG)

Research

A Survey of Elephants Having Had Human Assisted Lifts and Their Relevant Health Issues and Survivability

Ameoblastic Fibroma in a Captive Female Mexican Wolf (Canis lupus baileyi)

Analysis of Female Asian Elephant Prolactin Levels

Concentration-Dependent Chemosensory Responses Towards Pheromones are Influenced by Receiver Attributes in Asian Elephants

Endocrine Analysis and Assisted Reproductive Techniques in the Malayan Tiger (Panthera tigris jacksoni)

Evaluation of Prey Items and Their Effect on Predatory Behavior of Captive Wild Raptors

Evaluation of Progesterone and Luteinizing Hormone (LH) Concentrations in Female Asian Elephants

Evaluation of Symmetric Dimethylarginine Assay as a Marker for the Detection of Renal Disease in Domestic Chickens (Gallus gallus domesticus)

Geriatric Elephant Survey

Herd Dynamics in Captive Elephants of North America

High Diversity of Cryptic Piroplasm Infections in Raccoons From Selected Areas of the United States and Canada (Formerly named Babesia study)

Investigate the Approaches of AZA Accredited Zoos in Connecting Their Research With the Public

National Elephant Endotheliotropic Herpesvirus (EEHV) Lab

Pulmonary Aspergillosis in an Aldabra Tortoise (Aldabrachelys gigantean)

Reproductive Tract Neoplasia in Adult Female Asian Elephants

The Pharmacokinetics of Tramadol in African (Loxodonta africana) and Asian Elephants (Elephas maximus)

Wildlife Computational Ecology Lab

ENDANGERED WOLF CENTER

Field Conservation

AZA Mexican Wolf SSP – Meeting

KANSAS CITY ZOO

Field Conservation

Amphibian Ark

AZA Ape TAG – Conservation Initiative

AZA Tiger SSP – Tiger Conservation Campaign

Bird Endowment – Saving the Blues – Nido Adoptivo

Black Footed Cat Working Group

Black Mamba Anti-Poaching Initiative

Bolivian Amphibian Initiative – Lake Titicaca Water Frog

Botswana Predator Conservation Trust

Brown Hyena Project

Cheetah Conservation Fund (CCF)

Conservation Lower Zambezi

Eastern Spotted Skunk Health and Disease Assessment

Freshwater Mussel Propagation and Reintroduction

Giraffe Conservation Fund

Humboldt Penguin Consortium

IUCN/SSC Conservation Planning Specialist Group (CPSG)

Kansas City Zoo African Elephant Reproductive Conservation Initiative

Mabula Ground Hornbill Project

Marine Mammal and Pinniped Rescue Program/Marine Mammal Center

Marine MegaFauna Foundation

Panamanian Golden Frog Breeding Program

Pangolin Conservation

Polar Bear Arctic Ambassador and Research Program

Red Panda Network

Roundtable on Sustainable Palm Oil (RSPO)

The CREATE Project

TRAFFIC South East Asia

Trumpeter Swan

Turtle Survival Alliance

Wildlife Conservation Society (WCS) – 96 Elephants
Wyoming Toad Breeding, Reintroduction, and Field Survey Program
Zoo Conservation Outreach Group (ZCOG)

**Green Practices**

**ENERGY**
Documented Amount Spent
Documented Amount Used
Generated Renewable Energy On-Site

**EXTERNAL SUPPORT**
Received Support From External Sources for Green Projects

**FOOD**
Sourced Local Food or Grew it On-Site

**FUEL**
Documented Amount Spent
Documented Amount Used

**GREEN CERTIFICATIONS**
One or More Buildings LEED-Certified by the US Green Building Council

**GREEN PRACTICES IMPLEMENTED**
Alternative Transportation Benefits for Staff
Building Energy Management
Commingled Recycling
Community Solar Program
Community-Based Sustainability Projects
Composting (On-Site or Off-Site)
Generated Solar or Wind Energy
Graywater Reuse and/or Rainwater Harvesting
Green Building Policy/Commitment
Green IT
Green Purchasing Policy/Green Procurement
Procured Local Food for On-Site Animals and/or Guest
Wastewater Reduction
Waterwise Landscaping

**PLANS, POLICIES, AND BUDGETS**
Developed or Updated a Sustainability Plan (or Equivalent)
Developed or Updated a Sustainability Plan

**WASTE**
Documented Amount Recycled

**SAINT LOUIS ZOO**

**Education**
#byetobags
Adult Programs
Animal Awareness Days
AZA FrogWatch USA
Behind the Scenes Tours
Birthday Parties
Boo at the Zoo-Spooky Saturday
Camp KangaZoo and Teen Camp
Career Programs
Docent Carts and Seasonal Interpreter Program
Earth Day – Party for the Planet
Enrichment Eggstravaganza
Internal Training – Education Department, Docents, and Interpreters
Jungle Boogie
Just Like You at the Zoo
Lecture Series Programs
Library and Teacher Resource Center – Scavenger Hunts
Library and Teacher Resource Center – ZooCases
Make Tracks for the Zoo
Monsanto Education Gallery (Camp Joey, Early Childhood, Zoo Preschool, and the Wild Wonder Outpost)
Outreach and Distance Learning Programs
Overnight Programs
Public Officials Family Day
Raja’s Birthday Celebration
School Programs
School Tours
Shark Week
Stingrays at Caribbean Cove – Traveling Exhibit
Trivia Gone Wild
Wild Lights
Youth Programs
Zoo ALIVE Teen Volunteer Program
Zoo Friends Day
Zoo Parents Picnic
Zootoberfest

Field Conservation
Core Operating Support for the Sahara Conservation Fund (SCF)
Dama Gazelle Conservation Project Support Through the Sahara Conservation Fund (SCF)
Andean Bear Conservation Alliance
Arboviruses in Brazil
Box Turtle Ecology and Health: Comparison Between an Urban and a Rural Site
Camel Health at the Livestock-Wild Animal-Human Interface
Celebrating 10 Years of Zebra Conservation Through Film
Celebrating Grevy's Zebra Conservation Achievements and Sharing Great Grevy's Rally Results, Great Grevy's Ball, Great Goat Roast, and Associated Events
Center for American Burying Beetle Conservation
Center for Avian Conservation in the Pacific Islands
Center for Avian Health in the Galápagos Islands
Center for Conservation in Forest Park
Center for Conservation in Punta San Juan, Peru
Center for Conservation in Western Asia
Center for Conservation of Large Carnivores in Africa
Center for Native Pollinator Conservation
Developing a Communications Strategy for Grevy’s Zebra Trust
Ecuadorian Amphibian Collaboration
Environmental Education for the Conservation of the Mountain Nyala and its Habitat at the Bale Mountains National Park, Ethiopia
Establishing a Local Molecular Ecology and Veterinary Laboratory for the Conservation of the Fauna of Madagascar
Goualougo Triangle Ape Project (GTAP)
Grevy’s Zebra Trust

Green Practices
GREEN PRACTICES IMPLEMENTED
Alternative Fuel Usage for On-Site Fleet
Alternative Transportation Benefits for Staff
Building Energy Management
Commingled Recycling
Community-Based Sustainability Projects
Denitrification Systems On Ground
Diverted or Recycled Construction Waste
Energy Submetering
Generated Solar or Wind Energy
Graywater Reuse and/or Rainwater Harvesting
Green Building Policy/Commitment
Procured Local Food for On-Site Animals and/or Guest
Water Submetering
Waterwise Landscaping
Research

Animal Awareness Days Evaluation
Annual Visitor Study
Assessment of Zoo Veterinarian Attitudes Regarding Population Management Euthanasia
Changes in Human Health Parameters Associated With an Immersive Exhibit Experience at a Zoological Institution
Chinchilla (Chinchilla laniger) Behavioral Responses to a Visual Signal Preceding Handling
Collaborating to Improve Conservation of the Critically Endangered Cuban Crocodile
Determining the Potential Effects of Electrofishing on Hellbenders
Distribution of Lizards in Big Desert Habitat Before, During, and After Installation of Dimmable Lights
Distribution, Ecology, and Conservation of the Endangered Black-Breasted Leaf Turtle (Geoemyda spengleri) in China
Distribution, Ecology, and Conservation of the Endangered Black-Breasted Leaf Turtle (Geoemyda spengleri) in Northern Vietnam
Educational Participatory Asset Mapping in North St. Louis County
Efficacy and Reversal of Suprelorin® (Deslorelin) in the Clouded Leopard (Neofelis nebulosa)
Empathy and Moral Reasoning Development at Saint Louis Zoo Preschool
Evaluating Housing Parameters and Their Effects on Snake Welfare
Feasibility of an Offsite Conservation and Animal Science Center and Safari Park
Fecal Glucocorticoid Monitoring of Carnivores, Birds and Primates During Quarantine and Introduction to a New Habitat at the Saint Louis Zoo
Fecal Glucocorticoid Monitoring of Guinea Pigs Serving as Ambassador Animals in the Saint Louis Zoo’s Children’s Zoo
Fecal Glucocorticoid Production and Behavior of Juvenile Somali Wild Asses
Fecal Hormone Monitoring of Ovulatory Cycles, Testosterone Production, and Glucocorticoid Production in Banteng
Genetic Diversity of Peter’s Angola Colobus Monkey Populations in Northern Tanzania and in American Zoos
Hormone Monitoring of Free-Ranging Channel Island Foxes
Impact of Allowing Mate Choice on Reproductive Success and Animal Welfare
Improving the Impact of Zoo and Aquarium Conservation Education Experiences: A Values Orientation Approach
Investigating Social Networks of African Wild Asses and Grevy’s Zebras in a Zoo Setting
Investigation of Possible Genetic and Environmental Factors Leading to Uterine Disease in African Painted Dogs
Lifetime Reproductive Planning for the Fennec Fox
Mother-Infant Antelope Study
Observations and Management of Cryptosporidium Infection in Snakes
Observing Flighted and Flightless Waterfowls’ Behavioral Diversities on Bodies of Water
Pacific Bird Conservation MAC Education and Outreach Program Evaluation
Patterns of Fecal Steroids Associated With Reproduction in Cinereous Vultures (Aegypius monachus)
Phylogenomics of Endangered Asian Box Turtles (Cuora)
Polar and Grizzly Bear Use of Space and Activity Level in New Zoo Habitats
Population Management and Reversibility from Melengestrol Acetate (MGA) Implants in Black and White Colobus Monkeys (Colobus guereza)
Primate Canopy Trails Frontend and Formative Evaluation
Reproductive Viability Analysis (RVA) for Fennec Fox
Reproductive Viability Analysis (RVA) for the Asian Small-Clawed Otter
Reproductive Viability Analysis (RVA) for the Mexican Wolf
Reproductive Viability Analysis (RVA) for the Red River Hog
Salamander Relative Abundance and Disease Prevalence Study
Serum Concentration Comparisons of Fatty Acids, Amino Acids, Vitamins, Minerals, and Cholesterol, Between Free-Ranging and Zoo Polar Bears (Ursus maritimus)
Serum Nutrient Comparisons Between Free-Ranging and Zoo Painted Dogs (Lycaon pictus)
Status, Conservation, and Ecology of the Crocodilians in Cuba
STEM Matters: Investigating the Confluence of Visitor and Institutional Learning Agendas
Summative Evaluation of Grizzly Ridge Exhibit
The Effect of Educational Programs on the Behavior and Physiology of Fennec Foxes (Vulpes zerda)
Tracking Changes in Primate Behavior Throughout a Construction Period
Validating Noldus EthoVision as a Tool for Tracking Movement
Validation of a Canine Anti-Mullerian Hormone Assay for Use in Mexican Gray Wolves

SEA LIFE KANSAS CITY AQUARIUM
Education
Animal Adaptations
Bay of Rays Talk
Home Sweet Home
Marine Science Careers
Ocean Discovery Talk
Octopus Talk
Seahorse Talk
Shark Talk
Turtle Conservation Chat
Weedy Seadragon Talk
What’s For Lunch

Field Conservation
River and Wetlands Clean Up
Teaching Rivers in an Urban Environment (T.R.U.E. Blue) – Blue River Watershed Association

THE BUTTERFLY HOUSE
Education
Adventures in a Butterfly Garden
Brownie Bugs
Buzzing a Hive
Daisy Clover Petal
Hide a Butterfly
Insect Photography
Junior Gardener
Keeper for a Day
Ladybugs
Little Bugs
Story of a Butterfly
The World According to Insects
Webelos: Into the Wild
Wings of Wonder

Field Conservation
El Bosque Nuevo
Missouri Butterfly Monitoring Network
Project Pollinator

Green Practices
GREEN PRACTICES IMPLEMENTED
Commingled Recycling
Composting (On-Site or Off-Site)
Diverted or Recycled Construction Waste

Montana

GRIZZLY & WOLF DISCOVERY CENTER
Education
Bear Pepper Spray Demonstration
Birds of Prey Outreach
The View From Down Here

Field Conservation
Bear-Resistant Container Testing
West Yellowstone Christmas Bird Count

Green Practices
ENERGY
Documented Amount Used

GREEN PRACTICES IMPLEMENTED
Building Energy Management
Commingled Recycling
Diverted or Recycled Construction Waste
Green Purchasing Policy/Green Procurement
Wastewater Reduction

WASTE
Documented Amount Recycled

WATER
Documented Amount Used
Nebraska

LEE G. SIMMONS CONSERVATION PARK & WILDLIFE SAFARI

Education
Campouts
Day Camps
Family Classes
Keeper Talks
Outreach
Scout Programs
Special Events
Step-on Tours
Student Workshop
Teacher Workshops

Field Conservation
Cheetah Conservation Fund (CCF)
Citizen Science
Nature Conservancy
Whooping Crane Trust

Green Practices
ENERGY
Documented Amount Spent
Documented Amount Used

FOOD
Sourced Local Food or Grew it On-Site

FUEL
Documented Amount Spent
Documented Amount Used

GREEN PRACTICES IMPLEMENTED
Commingled Recycling
Composting (On-Site or Off-Site)
Graywater Reuse and/or Rainwater Harvesting
Procured Local Food for On-Site Animals and/or Guest
Wastewater Reduction
Waterwise Landscaping

WASTE
Documented Amount Composted
Documented Amount Recycled
Documented Amount Sent to Landfill

LINCOLN CHILDREN’S ZOO

Field Conservation
Salt Creek Tiger Beetle Propagation and Reintroduction Project

Green Practices
FOOD
Sourced Local Food or Grew it On-Site

Research
Allostatic Load of Captive and Free-Ranging Giraffe
Directional Freezing as a Method of Sperm Cryopreservation for Field Conservation Projects

OMAHA’S HENRY DOORLY ZOO & AQUARIUM

Education
African Goat Kraal
After School Program
Animal Encounters
Backstage Experiences
Campouts
Citizen Science
Day Camps
Eco Adventure
Family Programs
Free Flight Bird Show
Giraffe Encounter
Keeper Talks
Lemur Walkway
LION Classes
Little Lions Preschool
Long Distance Learning
Outreach Programs
Professional Development Workshops
School Group Walkabout Tours
Scout Classes
Stingray Beach
Student Workshops
The Wildlife Show
Touch Tank
Youth Volunteer Program
Zoo 2 You Trunks
Zoo-Wide Activity Event
Zoo-Wide Conservation Events

Field Conservation
American Bird Conservancy (ABC) – Bird Strike
Amphibian Conservation Area
Amphibian Enhancement in Urban Areas
Andasibe Reintroduction and Translocation Project (ART Project)
Andasibe Reintroduction and Translocation Project (ART Project) – Lemur Research Initiative
Aquarium Conservation Partnership (ACP)
AZA Puerto Rican Crested Toad SSP – Reintroduction
AZA SAFE
AZA SAFE – Cheetah
AZA Tiger SSP – Tiger Conservation Campaign
Bat Conservation International (BCI)
Belize Antillean Manatee Health Project
Belize Jaguar Project
Bermuda Fern Project
Bighorn Sheep Disease Study
Black-Footed Cat Project
Botswana Lion Disease and Genetics Survey
Catching Hope
Cheetah Conservation Fund (CCF)
Citizen Science: Butterfly, Amphibian
Colobus Conservation, Ltd.
Colors for Conservation
Conservation Centers for Species Survival (C2S2)
Conservation Fusion
Conservation of Madagascar’s Endemic Orchids
Coral Propagation Project
Cryptobranchid Interest Group
Crystal River Florida Manatee Health Project
Dian Fossey Gorilla Fund International
Florida and Belize Manatee Conservation Project
Foundation for the Conservation of Salamanders
Giant Armadillo: The Pantanal Project
Giraffe Conservation Foundation (GCF)
Gladys Porter Zoo – American Crocodile Conservation
Honduras Amphibian Rescue and Conservation Center (HARCC)
Iganyana Arts – Africa Matters
International Crane Foundation (ICF) – Crowned Crane
International Crane Foundation (ICF) – Whooping Crane
International Elephant Foundation (IEF)
International Rhino Foundation (IRF)
IUCN/SSC Conservation Planning Specialist Group (CPSG)
IUCN/SSC Conservation Planning Specialist Group (CPSG) – Amphibian Ark
Kianjavato Project
Lavavolo Project
Little Fireface Project – Protection of the Slow Loris
Mabula Ground Hornbill Project (MGHP)
Madagascar Biodiversity and Biogeography Project
Monarch Joint Venture
Montagne des Français Project
Nature Conservancy – China Land Trust
Northern Tuli Predator Project – Botswana
Okapi Conservation Project
Polar Bears International (PBI)
Project Puffin
Rare and Endangered Plant Program
Red Panda Network (RPN)
Salt Creek Tiger Beetle
Saola Conservation
Save Our Seabirds
Save the Snakes
SExual COral REproduction (SECORE)
Green Practices

ENERGY
Documented Amount Spent
Documented Amount Used
Generated Renewable Energy On-Site

FOOD
Sourced Local Food or Grew it On-Site

FUEL
Documented Amount Spent
Documented Amount Used

GREEN PRACTICES IMPLEMENTED
Alternative Fuel Usage for On-Site Fleet
Commingled Recycling
Composting (On-Site or Off-Site)
Denitrification Systems On Ground
Generated Solar or Wind Energy
Graywater Reuse and/or Rainwater Harvesting
Procured Local Food for On-Site Animals and/or Guest
Waterwise Landscaping

GREENHOUSE GAS EMISSIONS
Documented Amount of Greenhouse Gas Emissions

PLANS, POLICIES, AND BUDGETS
Dedicated a Line Item in the Budget for Green Practices
Developed or Updated a Sustainability Plan (or Equivalent)

WASTE
Documented Amount Composted
Documented Amount Recycled
Documented Amount Sent to Landfill

WATER
Documented Amount of Wastewater Generated
Documented Amount Spent
Documented Amount Used

Research
African Elephant Project
Browse Nutrition Initiative
Conservation Center for Species Survival (C2S2) – The Cheetah Sustainability Project (CSP)
Conservation, Propagation, Genetics, and Reintroduction of the Yellow Lady’s Slipper Orchid in Nebraska
Conserving the Highly Threatened Fern – Diplazium molokaiense
Development of a Genome Resource Bank for Tigers
Development of Methods for Voluntary Semen Collection in the Philippine Crocodile
Development of Transcervical Artificial Insemination in Tigers
Evaluation of Pork as a Protein Source for Managed Carnivores
Factors Affecting Breeding Success in Zoo Managed Male Snow Leopards (Panthera uncia)
Fish Breeding Project
Investigating the Interactions Between Obesity, Stress, and Reproductive Cyclicity in Elephants
Kianjavato Project: Data Analysis
Lavavolo Project: Data Analysis
Madagascar Biodiversity and Biogeography Project: Laboratory Genetic Work
Montagne des Français Project: Research
Nutrition Research Program
Prevalence of Irritable Bowel Disease, Infanticide, Bloat, and Cystinuria in Managed Maned Wolves and Factors Contributing to Occurrences
Torotorofotsy Project: Data Analysis
Urchin Breeding Project
**RIVERSIDE DISCOVERY CENTER**

**Field Conservation**
- Panhandle Frogwatch USA Chapter RDC
- Salamander Saturday
- Tiger Conservation Campaign

**Green Practices**
- **GREEN PRACTICES IMPLEMENTED**
  - Commingled Recycling
  - Composting (On-Site or Off-Site)
  - Green Building Policy/Commitment

**Nevada**

**SHARK REEF AQUARIUM AT MANDALAY BAY**

**Field Conservation**
- AZA Conservation Grants Fund
- Komodo Conservation
- Reef Check
- S.A.F.E.
- Sea Turtle Conservancy
- The Ocean Project

**New Jersey**

**ADVENTURE AQUARIUM**

**Education**
- 21st Century Community Learning Centers – Science Enrichment
- Behind the Scenes Tours
- Camden Waterfront Trail Engagement – Trail and On-Water Programming
- Canoe Mobile
- CAUSE (Community Urban Science Enrichment) Program
- Classroom and Auditorium Programs
- Community and Urban Science (CAUSE) Summer Camp
- Embedded School Programming
- Field Trip Planner

**Green Practices**
- Fins for the Future
- High School Student Shadow Program
- Hippo Awareness Weekend
- Marine Advanced Technology Education (MATE) – Remotely-Operate Vehicle (ROV) Program
- Meet Us in the Wild – Field Programs
- Outreach – Traveling Programs
- Penguin Awareness Day
- Philadelphia Science Festival
- Philadelphia-Camden Informal Education Collaborative (PISEC)
- River Days
- Science on Screen
- Scout Badge Workshops
- Sea Turtle Awareness Weekend
- Shark Awareness Weekend
- Shark in the Dark – Overnights
- Summer Seafari Camp
- Teacher Professional Development
- Teen Marine Institute
- That’s A-Moray: Love Below Sea Level (Valentines Event)

**Field Conservation**
- AZA FrogWatch USA
- AZA SAFE – African Penguin Artificial Nest Box Program
- Bald Eagle Nest Monitoring
- Coral Restoration Foundation
- Feathers for Native Americans
- Horseshoe Crab Monitoring
- Horseshoe Crab Rearing
- RiverSweep
- Sea Turtle Conservancy
- Southern African Foundation for the Conservation of Coastal Birds (SANCCOB)
- Turgwe Hippo Trust

**Green Practices**
- **ENERGY**
  - Documented Amount Spent
  - Documented Amount Used
GREEN PRACTICES IMPLEMENTED
Building Energy Management
Commingled Recycling
Denitrification Systems On Ground
Green IT
Wastewater Reduction

WASTE
Documented Amount Recycled
Documented Amount Sent to Landfill

Research
Hippo Saliva Cortisol Study

BERGEN COUNTY ZOOLOGICAL PARK
Education
96 Elephants
A Touch of Nature
Amazing Adaptation
Amphibian Day
Amphitheater Show – Mammals
Amphitheater Show – Pets!
Amphitheater Show – Reptiles
Amphitheater Show – Story Time
Amphitheater Show – Wild New Jersey
Animal Enrichment
Animal Families
Animal Habitats
Animal Wrappers
Autism Awareness Day
Bergen Zoo School
Bison Day
Brownie Bugs
Classy Animals
Colors and Shapes
Endangered Species Day
Hawks Over the Hudson
In My Backyard
Members Night
Night Owls
Nocturnal Gators
Party for the Planet
Playtime at the Zoo
Recycled Art
Save the Eagles Day
Sheep Shearing
Spineless Wonders
Super Science Days and Career Days
Theme Day Story Times
Wild and Crafty Animal Tales
Wild and Crafty Zoo Tour
Wild Pets
World Tapir Day
Zoo Babies
Zoo Camp
Zoo Careers
Zoo Kids

Green Practices

CAPE MAY COUNTY PARK ZOO
Field Conservation
Conserve Wildlife Foundation of New Jersey
Giraffe Conservation Foundation (GCF)
International Bongo Foundation for Mt. Kenya Wildlife Conservation
Turtle Survival Alliance (TSA)
JENKINSON’S AQUARIUM

Education
Amazing Amphibians
Animal Encounters
Behind the Scenes Tour
Breakfast With the Animals
Fishy Tales and Shark Scales
Habitat Habits
Mermaid Tea Party
NJ’s Precious Pinelands
No Bones About It
Outrageous Reptiles
Penguin Pointers
Pizza and Penguins
Polar Bears in a Warming World
Species Survival
Tea by the Sea

Field Conservation
American Littoral Society
AZA Conservation Grants Fund (CGF)
AZA FrogWatch USA
AZA SAFE – Vaquita Rescue Project
AZA/Wildlife Trafficking Alliance
B.E.A.R.
Channel Islands Marine and Wildlife Institute
Clean Ocean Action
Delaware Bay Horseshoe Crab Spawning Survey
Gotham Whale
Marine Academy of Technology and Environmental Science (MATES)
New Jersey Beach Buggy Association
Ocean Conservancy
Polar Bears International (PBI)
Project Terrapin
Save Barnegat Bay
SaveNature.Org
Sawfish Conservation Society (SCS)
Sea Turtle Recovery (STR)

Seabird Ecological Assessment Network (SEANET)
Southern African Foundation for the Conservation of Coastal Birds (SANCCOB)
The Marine Mammal Center
The Ocean Project
Turtle Survival Alliance (TSA)
Wildlife Center Friends

Green Practices

ENERGY
Documented Amount Used

FOOD
Sourced Local Food or Grew it On-Site

Research
Beach Sweeps (Bi-Annual Coastal Cleanup)
Operation Oyster

New Mexico

ALBUQUERQUE BIOLOGICAL PARK

Education
Animal Encounters at the Aquarium
Animal Encounters at the BUGarium
Animal Encounters at the Zoo
Aquarium Overnights
BioVan and Rio Rangers
Discover the BioPark
Discovery Days at the Aquarium
Discovery Days at the Botanic Garden
Discovery Days at the Zoo
Earth Week Celebration
Endangered Species Awareness Week
Garden Workshop Series
Monthly Lecture Series
Narrated Aquarium Feedings
Narrated Zoo Feedings
Preschool Program
New York

BUFFALO ZOO

Education
Animal Encounters – Free
AZA FrogWatch USA – Buffalo Zoo Chapter
Birthday Parties
Buffalo Public School #59/90 Zoo Science Program
Buffalo Zoo Preschool
Camps (Combines Spring, Summer, and Winter)
Cub Club Preschool Program
Distance Learning Programs
Docent Training
Educator’s Guide
Gnus – Docent Newsletter
Guided Tours
Homeschool Programs
Junior Zoo Teen Naturalist Program
Keeper Talks
Living Treehouse
On-Site School Programs
Outreach Programs
Scout Badge Programs
Shows/Demonstrations
Sidewalk Safari Carts
Strolling Around the World Stroller Program
Western New York Family Nature Club
Wild Weekend Workshops
Zoo Quests
Zoo Snooze Overnight Program
Zoo Teen Naturalist Program

Field Conservation
Abidjan Zoo Project: Côte d’Ivoire
IUCN Species Assessments
Native Species Program - Herpetology
Socorro Dove Conservation

Green Practices
GREEN PRACTICES IMPLEMENTED
Procured Local Food for On-Site Animals and/or Guest

ALEXANDRIA ZOOLOGICAL PARK

Green Practices
GREEN PRACTICES IMPLEMENTED
Commingled Recycling
Community-Based Sustainability Projects
Composting (On-Site or Off-Site)
Diverted or Recycled Construction Waste
Procured Local Food for On-Site Animals and/or Guest
Stormwater Management Program

LIVING DESERT ZOO & GARDENS STATE PARK

Field Conservation
Bolson Tortoise Program

Green Practices
ENERGY
Generated Renewable Energy On-Site

Field Conservation
Asian Elephant Support
Asian Elephant Support (AES)
Association of Zoological Horticulture (AZH) – Plant Conservation Fund
AZA Conservation Grants Fund (CGF)
AZA FrogWatch USA
AZA Puerto Rican Crested Toad SSP - Caribbean Wildlife Alliance via Fort Worth Zoo
Buffalo Niagara Riverkeeper
Dian Fossey Gorilla Fund
Gorilla Doctors
International Elephant Foundation
International Rhino Foundation (IRF) - Indian and Sumatran Rhinos
Polar Bears International (PBI)
Sahara Conservation Fund (SCF)
Snow Leopard Trust (SLT)
Turtle Survival Alliance (TSA)
World Parrot Trust (WPT)

Green Practices

ENERGY
Documented Amount Spent
Documented Amount Used

FOOD
Sourced Local Food or Grew it On-Site

FUEL
Documented Amount Spent
Documented Amount Used

GREEN PRACTICES IMPLEMENTED
Commingled Recycling
Community-Based Sustainability Projects
Composting (On-Site or Off-Site)
Graywater Reuse and/or Rainwater Harvesting
Waterwise Landscaping

PLANS, POLICIES, AND BUDGETS
Dedicated a Line Item in the Budget for Green Practices
Specified a Portion of the Amount Saved for Next Year’s Green Practices

WASTE
Documented Amount Composted
Documented Amount Sent to Landfill

Research
Decline in Stereotypic Behavior of Asian Elephants
The Influence of Contraceptive on Hormonal Patterns and Behavior in Captive Western Lowland Gorillas

ROSAMOND GIFFORD ZOO AT BURNET PARK

Field Conservation
American Association of Zoo Keepers (AAZK) - Bowling for Rhinos
Amphibian Ark
International Elephant Foundation (IEF)
IUCN/SSC Conservation Planning Specialist Group (CPSG)
Laguna Atascosa National Wildlife Refuge
Ocean Conservancy
Plastic Free July Sponsorship
Red Panda Network (RPN)
Snow Leopard Trust (SLT)
Turtle Survival Alliance

SENECA PARK ZOO

Education
Animal Presentations
Bunk With Beasts
Expeditions
Family Overnights
Homeschool classes
KinderZoo
Nature Hikes
Park Clean Ups
Scout Workshops
ZooCamp
ZooTeen Leaders + ZooTeens

Field Conservation
American Association of Zoo Keepers (AAZK) - Bowling for Rhinos
Black Bear Den Surveys
Chittenango Ovate Amber Snail Annual Count
Eastern Massasauga Rattlesnake Mark and Recapture
Giraffe Conservation Alliance
Giraffe Conservation Foundation
Health in Harmony
International Animal Rescue (IAR)
International Elephant Foundation (IEF)
International Rhino Foundation (IRF)
Lake Sturgeon Restoration in the Genesee River at Seneca Park
Polar Bears International (PBI)
Snow Leopard Trust (SLT)
Southern African Foundation for the Conservation of Coastal Birds (SANCCOB)
Turtle Survival Alliance (TSA)

Green Practices

ENERGY
Documented Amount Used

GREEN PRACTICES IMPLEMENTED
Commingled Recycling
Composting (On-Site or Off-Site)

WATER
Documented Amount Used

Research

Assessment of Basal Seminal Traits and Semen Cryopreservation in the Canada Lynx

STATEN ISLAND ZOO

Education
Animal Training Demonstrations
Autism Awareness Day
Breakfast and Lunch With Santa
Breakfast With the Beasts
Breakfast With the Bunny
CASA (Cultural After School Adventure Program)
Conservation Celebration
Cub Scout Day
Dinosaurs and Fossils
Dinosaurs Rock
Docent Presentations

Field Conservation
AZA FrogWatch USA – Local Chapter Coordinators
AZA FrogWatch USA – Volunteers
Blue Heron BioBlitz
King Cobra Conservancy
Lemur Love, Inc

Research
Milk Composition of Two-Toed Sloth (*Choloepus hoffmanni*)
Normal Cytology and Bacterial Flora From Pouches of Red Kangaroos (*Macropus rufus*) at SIZ
TREVOR ZOO

Education
Birthday Party Presentations
Climate Change Exhibit Media
College Volunteer & Fieldwork Program
Conservation Handouts
Group Animal Presentations On-Site
Keeper Talks
Millbrook School Community Service
Science Presentation (Talk and/or Animal Presentations) Off-Site
Staff Guided Tours
Staff Presentations (Animal Behavior, Adaptations, Nutrition, Zoo’s Roles, and Conservation)
Summer Counselor Program
Summer Volunteer Program
Trevor Zoo Teacher’s Guide

Field Conservation
Bog Turtle Population Analysis and Habitat Restoration
Invasive Species Control: Pale Swallowwort
Trevor Conservation Support Fund: TSA
Wood Turtle Population Survey and Habitat Analysis

Green Practices
ENERGY
Documented Amount Spent
Documented Amount Used
Generated Renewable Energy On-Site

FOOD
Sourced Local Food or Grew it On-Site

FUEL
Documented Amount Used

GREEN PRACTICES IMPLEMENTED
Commingled Recycling
Community Solar Program
Completed Greenhouse Gas Inventory

Composting (On-Site or Off-Site)
Generated Solar or Wind Energy
Green Building Policy/Commitment
Green Purchasing Policy/Green Procurement
Waterwise Landscaping

PLANS, POLICIES, AND BUDGETS
Dedicated a Line Item in the Budget for Green Practices
Developed or Updated a Sustainability Plan (or Equivalent)
Developed or Updated a Sustainability Plan

WASTE
Documented Amount Composted
Documented Amount Recycled
Documented Amount Sent to Landfill

Research
Red Panda Juvenile Mortality Study
The Effects of Snow Leopard Stimulants on Red Panda Corticosterone Levels at the Trevor Zoo

UTICA ZOO

Education
Guided Tour
Home School Classes
Preschool Classes
Zoo Camps
ZooMobile

Green Practices
ENERGY
Documented Amount Spent
Documented Amount Used
Generated Renewable Energy On-Site

FOOD
Sourced Local Food or Grew it On-Site

FUEL
Documented Amount Used

GREEN PRACTICES IMPLEMENTED
Commingled Recycling
Community Solar Program
Completed Greenhouse Gas Inventory

Composting (On-Site or Off-Site)
Generated Solar or Wind Energy
Green Building Policy/Commitment
Green Purchasing Policy/Green Procurement
Waterwise Landscaping

PLANS, POLICIES, AND BUDGETS
Dedicated a Line Item in the Budget for Green Practices
Developed or Updated a Sustainability Plan (or Equivalent)
Developed or Updated a Sustainability Plan

WASTE
Documented Amount Composted
Documented Amount Recycled
Documented Amount Sent to Landfill

Research
Red Panda Juvenile Mortality Study
The Effects of Snow Leopard Stimulants on Red Panda Corticosterone Levels at the Trevor Zoo

WILDLIFE CONSERVATION SOCIETY

Education
Adult Overnight
Adult Volunteer Interpretation
Advanced Inquiry Program (AIP)
Afterschool Programs
Aquarium Outreach
Birthday Parties
Brooklyn Cultural Adventures Program
Community Outreach Program/Special Events
Discovery Guides
Family Overnight Adventures
Family/Science Days
Guided Tours
Informal Programs: Adult Programs
Informal Programs: Children & Families
Informal Programs: Scouts
Informal Programs: Zoo Play Classes
Nature Club
NatureStart™
Professional Development Courses
Project TRUE (Teens Researching Urban Ecology)
Scavenger Hunts
School Partnerships
School Programs (Classroom)
Urban Advantage
WCS Presents Field Sight
WCS Youth JIVE (Job, Internship, and Volunteering Expo)
WCS-U
Wildlife Conservation Corps
Wildlife Theater
Youth Advisory Council (YAC)
Youth Ocean Conservation Summit
Zoo and Aquarium Summer Camp
Zoo Quests

Field Conservation
AZA Komodo Dragon SSP – Conservation Fund
AZA SAFE
Curatorial Conservation Project – Batagur Conservation in India With Turtle Survival Alliance
Curatorial Conservation Project – Big Headed Turtle Conservation Program
Curatorial Conservation Project – Cambodian Royal Turtle Conservation
Curatorial Conservation Project – Canada Goose Population Management
Curatorial Conservation Project – Cuban Crocodile Breeding Facility Support and Reintroduction Effort
Curatorial Conservation Project – Headstart Program for Eastern Hellbender
Curatorial Conservation Project – Propagation of the Extinct-in-the-Wild Kihansi Spray Toad
Curatorial Conservation Project – Puerto Rican Crested Toad Propagation
Curatorial Conservation Project – Resident Bat Species in the Bronx, New York
Curatorial Conservation Project – Siamese Crocodile Conservation in Cambodia
Curatorial Conservation Project – Siamese Crocodile Conservation in Indonesia
Curatorial Conservation Project – Support of the Madras Crocodile Bank Trust, King Cobra Ecology Project
Give A Sip Campaign
Global Conservation Projects – Africa
Global Conservation Projects – Asia
Global Conservation Projects – Challenges and Central Initiatives
Global Conservation Projects – Conservation Science and Solutions
Global Conservation Projects – Latin America and the Caribbean
Global Conservation Projects – Marine-Seascape Conservation
Global Conservation Projects – North America
IUCN/SSC Conservation Planning Specialist Group (CPSG)
New England Cottontail Rabbit Conservation Project
Veterinarian and Pathological Project – Philippine Forest Turtles Confiscation Event
Veterinarian Project – Assessing the Health of Atlantic Shark Populations via Hematology, Plasma Biochemistry, Protein Electrophoresis, Cholesterol Electrophoresis, and Acute Phase Proteins
Veterinarian Project – Citizen Science Reveals Female Sand Tiger Sharks (Carcharias taurus) Exhibit Signs of Site Fidelity on Shipwrecks
Veterinarian Project – Health Assessment and Disease Surveillance of Grand Cayman Iguanas
Veterinarian Project – Health Assessment of Common Loons in the Adirondacks
Veterinarian Project – Health Assessments of Bog Turtles in the Northeastern United States
Green Practices

GREEN PRACTICES IMPLEMENTED

- Alternative Fuel Usage for On-Site Fleet
- Building Energy Management
- Completed Greenhouse Gas Inventory
- Composting (On-Site or Off-Site)
- Diverted or Recycled Construction Waste
- Graywater Reuse and/or Rainwater Harvesting
- Green Building Policy/Commitment
- Stormwater Management Program

Research

Curatorial Research Project – Evaluation of the “Buddy” Digital Egg Monitor as a Tool for Measuring and Tracking Avian Embryonic Heart Rate

Curatorial Research Project – Genetic Analysis of the Inca Tern Colony at the Wildlife Conservation Society (WCS)/Bronx Zoo

Curatorial Research Project – Genetic Analysis of the US Population of Baer’s Pochard for Improved Captive Management

Curatorial Research Project – Investigation of Problematic Interactions Between Bolivian Gray Titi Monkeys and Superb Starlings in a Mixed-Taxa Exhibit

Curatorial Research Project – Investigation of Waterfowl Egg Density as a Predictor for Artificial Incubation Relative Humidity Needs

Curatorial Research Project – Monitoring Behavior During Breeding Introductions of a Naive Snow Leopard Pair

Curatorial Research Project – Quantifying Social Changes Within a Troop of Japanese Macaque After Introduction of a New Male

Curatorial Research Project – Retrospective Analysis of Waterfowl Propagation Records at the Central Park Zoo

Veterinarian Project – Investigation Into Diagnostic and Therapeutic Options for Sarcocystosis in Captive Thick-Billed Parrots

Veterinarian Project – Acute Phase Protein and Protein Electrophoresis Values for Captive Bongo (Tragelaphus eurycerus)

Veterinarian Project – Assessing Efficacy of an Aspergillus Fumigatus Vaccine in Inca Terns and Eider Ducks

Veterinarian Project – Husbandry, Morbidity, and Mortality of Cloud Rats
Veterinarian Project – Investigating Cardiac Disease in Gelada
Veterinarian Project – Investigation Into the Distribution and Speciation of Entamoeba Infection and Species Within the Reptile Collection at the Bronx Zoo
Veterinarian Project – Investigations Into the Causes and Treatment of Ulcerative Dermatitis in Captive Waldrapp Ibises
Veterinarian Project – Pharmacokinetics of Ponazuril in Indian Peafowl
Veterinarian Project – Reproductive Assessments of Select Ex-Situ Shark Populations Within the New York Aquarium
Veterinarian Project – Retrospective Analysis of Mortality in Captive Bongo (Tragelaphus eurycerus)
Veterinarian Project – Retrospective Mortality Review of Tentacled Snakes in the Wildlife Conservation Society (WCS) Collections
Veterinarian Project – Speciation of Malaria (Plasmodium) Parasites in Species of Captive Penguin, Tern, and Eider at the Wildlife Conservation Society
Veterinarian Project – The Use of Awake CT-Scan for the Evaluation of Penguin Air Sac and Lung Volumes and Identification of Pulmonary Lesions

Island Conservation – Mona Iguana Project
Sawfish Conservation Society
Southern African Foundation for the Conservation of Coastal Birds (SANCCOB)
Turtle Survival Alliance
Zoo Conservation Outreach Group (ZCOG)

Green Practices

ENERGY
Generated Renewable Energy On-Site

EXTERNAL SUPPORT
Received Support From External Sources for Green Projects

FOOD
Sourced Local Food or Grew it On-Site

FUEL
Documented Amount Spent

GREEN CERTIFICATIONS
One or More Buildings LEED-Certified by the US Green Building Council

GREEN PRACTICES IMPLEMENTED
Commingled Recycling
Community-Based Sustainability Projects
Composting (On-Site or Off-Site)
Graywater Reuse and/or Rainwater Harvesting
Stormwater Management Program
Waterwise Landscaping

WATER
Documented Amount Spent

Research
Bat Species Utilization of Forest Canopy
Box Turtle Connection Project
Candid Critters

North Carolina

DUKE UNIVERSITY LEMUR CENTER
Field Conservation
Duke Lemur Center – Sambava-Andapa-Vohemar-Antalaha (SAVA) Conservation initiative
Madagascar Fauna and Flora Group (MFG)

Green Practices
GREEN PRACTICES IMPLEMENTED
Composting (On-Site or Off-Site)

Research
Facilitation of External Research

GREENSBORO SCIENCE CENTER
Field Conservation
AZA Conservation Grants Fund (CGF)
Coral Restoration Foundation
MUSEUM OF LIFE AND SCIENCE

Education
Girl Scout Programs
Homeschool Programs
Keeper Talks
School Programs
Summer Camp
The Lab

Field Conservation
Red Wolf Education
Turtle Survival Alliance

Green Practices
GREEN PRACTICES IMPLEMENTED
Commingled Recycling
Composting (On-Site or Off-Site)
Smart Building Strategies
Used Enterprise (IT) Solutions to Track and Measure Sustainability Performance
Water Submetering
Waterwise Landscaping

Research
Building With Biology
Citizen Science, Climate Change, and Resilient Communities
Community Resilience to Climate Change Public Forums
Electroreception in Butterflies
NSF Career: Method Development for High-Resolution Underway N2 Fixation Measurements

NORTH CAROLINA AQUARIUM AT FORT FISHER

Education
Alligator Egg Hunt - Easter Program
Animal Encounters
Animal Programs
Auditorium Program
AZA FrogWatch USA
Behind-the-Scenes Tours
Birthday Parties
Camps – Summer Camps and Year-Round Day Camps
Cape Fear Shoals Dive Presentation
Distance Learning
Family Nature Club
Feeding Presentations
General Outreach
Homeschool Programs
Indoor Programs
Nature Play With Girls Leadership Academy of Wilmington
Outdoor Exploration Programs
Outreach Events
Scout Programs
Sea Scholars
Self-Guided Tours for School Groups
Sleepovers
Summer Teen Volunteer Program
Teen Ocean Stewards

Field Conservation
Aquarium Conservation Partnership (ACP)
Carolina Gopher Frog Reintroduction
Conservation Coordination
Elasmobranch Reproductive Studies
Habitat Use Patterns of Cownose Rays
Habitat Utilization of Mature Female Sand Tiger Sharks (Carcharias taurus) in North Carolina Coastal Waters (Using Acoustic Telemetry Techniques)
Lionfish Management
Marine Mammal Stranding Response
SAFE Within
Sand Tiger Shark Identification
Sea Turtle Stranding Response Team
The Ocean Project

Green Practices
ENERGY
Documented Amount Spent
Documented Amount Used
EXTERIOR SUPPORT
Received Support From External Sources for Green Projects

FUEL
Documented Amount Spent
Documented Amount Used

WATER
Documented Amount Spent
Documented Amount Used

Research
Fish Propagation Programs in North Carolina Aquariums

NORTH CAROLINA AQUARIUM AT PINE KNOLL SHORES

Education
Animal Encounters
Behind the Scenes Tours
Camp Programs
Digital Puppetry Program
Distance Learning
Dive Presentations
Early Childhood Education Programs
Feeding Presentations
Fishing Programs
Kid’s Parties and Sleepovers
Large Group Outreach Programs
Live Animal Programs
Outdoor Recreation Programs
Outreach Programs – Festivals and Community Events
Paddling Programs
School Group – Lab Programs
School Group Auditorium Programs
Scout Programming
Small Group Outreach Programs
Sustainable Seafood Programs
Teacher Workshops
Teen Programs
Themed Daily Programs

Field Conservation
Aquarium Conservation Partnership (ACP)
Carolina Gopher Frog Reintroduction
Conservation Coordination
Elasmobranch Reproductive Studies
Habitat Use of Sand Tiger Sharks
Habitat Use Patterns of Cownose Rays
Lionfish Management
Marine Mammal Stranding Response
SAFE Within
Sand Tiger Shark Identification
Sea Turtle Stranding Network
The Ocean Project
Theodore Roosevelt Nature Inventory

Green Practices
GREEN PRACTICES IMPLEMENTED
Building Energy Management
Commingled Recycling
Composting (On-Site or Off-Site)
Diverted or Recycled Construction Waste
Generated Solar or Wind Energy
Graywater Reuse and/or Rainwater Harvesting
Green IT
Procured Local Food for On-Site Animals and/or Guest
Purchased Green Power or Renewable Energy Credits (RECs)
Stormwater Management Program
Wastewater Reduction
Waterwise Landscaping

Research
Fish Propagation Programs in North Carolina Aquariums
Education

Adult Craft
All About Alligators
All About Sharks
Alligator Encounter
Alligator Feeding
Aqua Tots
Aquarist for the Day
Art in the Ocean
Beach Exploration
Behind the Scenes Tours
Believe It or Not
Big Sweep
Birthday Parties
Breakfast With the Rays
Career Fairs
Circle of Life
Cold Blooded Critters Tour
Creating Change
Creature Features
Day Camps
Dialogue With the Diver
Disaster Zone
Dolphin Math
Earth Day
Educational Videos
Endangered Species Day
Ends of the Earth
Fish Feeding
Flying Reptiles
Freshwater Turtles
Getting to Know: Owls
Got Fur?
Growing Green
Guide to the Solar System: SOS Program
Gyotako
Happy Otter Hour
Impromptus
International Shark Awareness Day
Jellies
Let’s Go Crabbing
Library Programs
Lights Out!
Lobby Feed
Marine Invertebrate Lab
Nature of the Outer Banks
Nature’s Heroes
Nautical Wreaths
Noxious Nature
Ocean Jeopardy
Ocean Rescue Training
Oceans 101
Octopus
Opossum Encounter
Otter Enrichment
Paddling Around Roanoke Island
PM Live Animal & Tour – 2 Hours
Proper Pet Awareness Day
Puppet Shows
Quarantine Tours
Rescue Men
Saltwater Badge Program
Sea Turtle Egg Hunt
Sea Turtle Encounter
Sea2Sound Walking Field Trip
Shark Bites
Shark Dissection
Shark Exhibit Tour
Shark Feeding Program
Sharks!
Sleeping With the Sharks
Snake Encounter
Squid Dissection
Standup Paddleboarding
STAR Center Tour and Program
Stars and More
Stingray Feeding
Summer Camp
Tail Spin
Tank Talks
Touch Tank Animals
Trick or Treat Under the Sea
Wandering Nomads: Turtles
Weather or Not
Wetland Walks
What’s the Catch
World Oceans Day
World of Weird

Field Conservation
Carolina Gopher Frog Reintroduction
Conservation Coordination
Elasmobranch Characterization in the Cape Fear River
Elasmobranch Reproductive Studies
Habitat Use Patterns of Cownose Rays
Lionfish Management
Marine Mammal Stranding Response
SAFE Within
Sand Tiger Shark Conservation and Management
Sand Tiger Shark Identification
Sea Turtle Rehabilitation
The Ocean Project

Green Practices
EXTERNAL SUPPORT
Received Support From External Sources for Green Projects

GREEN PRACTICES IMPLEMENTED
Building Energy Management
Commingled Recycling
Composting (On-Site or Off-Site)
Diverted or Recycled Construction Waste
Generated Solar or Wind Energy
Graywater Reuse and/or Rainwater Harvesting
Green Building Policy/Commitment
Green Purchasing Policy/Green Procurement
Procured Local Food for On-Site Animals and/or Guest
Stormwater Management Program
Wastewater Reduction

PLANS, POLICIES, AND BUDGETS
Developed or Updated a Sustainability Plan (or Equivalent)
Developed or Updated a Sustainability Plan

Research
Aquatic Conservation Partnership
Fish Propagation Programs in North Carolina Aquariums

NORTH CAROLINA ZOO
Field Conservation
Big Cat and Other Wildlife Conservation in Southern Africa
Carolina Gopher Frog Headstarting
Conservation of Avifauna on the Mariana Islands
Conservation of Elephants and Other Wildlife in Nigeria’s Yankari Game Reserve
Conservation of Vultures in Tanzania
Conservation Staff
Cross River Gorilla Monitoring in Nigeria and Cameroon
Giraffe SAFE
Hellbender Surveys in Western North Carolina
Local Land Purchase and Management
Mabula Ground Hornbill Conservation
Madagascar Radiated Tortoise Rescue
Monarch Watch – Monarch Waystation Program
Namibia Rhino Conservation
Puerto Rican Crested Toad Conservation
Red Wolf Breeding and Reintroduction
Sahara Conservation Fund (SCF)
Snare Removal Patrols in Kibale National Park, Uganda
Spatial Monitoring and Reporting Tool (SMART)
Conservation Monitoring Software Development
The Elephants of Cameroon
Turtle Survival Alliance Support
UNITE for the Environment Conservation Education Project – Uganda’s Kibale National Park
Virgin Islands Boa Recovery

Green Practices

ENERGY
Documented Amount Spent
Documented Amount Used

EXTERNAL SUPPORT
Received Support From External Sources for Green Projects

FOOD
Sourced Local Food or Grew it On-Site

FUEL
Documented Amount Spent
Documented Amount Used

GREEN CERTIFICATIONS
Certified Under ISO 14001

GREEN PRACTICES IMPLEMENTED
Alternative Fuel Usage for On-Site Fleet
Building Energy Management
Commingled Recycling
Community-Based Sustainability Projects
Composting (On-Site or Off-Site)
Energy Submetering
Generated Solar or Wind Energy
Graywater Reuse and/or Rainwater Harvesting
Green Building Policy/Commitment
Green IT
Green Purchasing Policy/Green Procurement
Procured Local Food for On-Site Animals and/or Guest
Smart Building Strategies
Stormwater Management Program
Used Enterprise (IT) Solutions to Track and Measure Sustainability Performance
Used Environmental Management System

Wastewater Reduction
Water Submetering
Waterwise Landscaping

PLANS, POLICIES, AND BUDGETS
Developed or Updated a Sustainability Plan (or Equivalent)
Developed or Updated a Sustainability Plan

WASTE
Documented Amount Composted
Documented Amount Recycled
Documented Amount Sent to Landfill

WATER
Documented Amount of Wastewater Generated
Documented Amount Spent
Documented Amount Used

Research

African Vulture Research
Analysis of Fatty Acid Profile in Eastern Box (Terrapene carolina carolina) and Common Snapping (Chelydra serpentina) Turtles for Wild and In-Human Care Environments
Ape Movement
Assessment of Disease in Raccoon Latrines
Black Bear Behavioral Study
Chimpanzee Behavior Study
Cross River Gorilla Disease Transmission Study
Eastern Box Turtles (Terrapene carolina) and Marine Toads (Bufo marinus) Blood Study
Education Evaluation of In-Situ Conservation Education Work
Effect of Multi-Radiance Low-Level Laser Therapy and Topical Silver Sulfadiazine on Healing Characteristics of Dermal Wounds in Marine Toads (Rhinella marina)
Elephant Behavioral Study at the North Carolina Zoological Park
Elephant Body Condition
Elephant Nutrition Study
Enrichment Use by Arctic Seabirds
Gorilla Enrichment and Behavior
Gorilla Fecal Microbiome Assessment
Hamadryas Baboon Behavior Study
Insect Nutrition as Feed Animals
Marine Toad Diet Study
Otter Behavior Study
Polar Bear Behavior
Proteins in Box Turtle Post Trauma
Rhino Fatty Acid Profile
Sand Cat Behavior
Snake Mark-Recapture Study
Virgin Island Boa Study
Visitor Studies
White Tailed Deer Reproduction

WESTERN NORTH CAROLINA NATURE CENTER

Education
AZA FrogWatch USA
Critter Time for Tikes and Tots
One-Day Special Events
Summer Camp Programs
Young Naturalists and Young Curators

Field Conservation
American Chestnut Tree Recovery Program
Appalachian Wildlife Refuge – Host Site
AZA FrogWatch USA
Bat and Bird Box Installation and Monitoring
Eastern Hellbender Rehabilitation Program
E-Bird Monitoring
Ecology Project International
Elk Ecology Family Camping Workshop
Great Smoky Mountains All-Taxa Biodiversity Inventory Project (ATBI)
Trout in the Classroom – Trout Headstart Program

Green Practices
FOOD
Sourced Local Food or Grew it On-Site

GREEN CERTIFICATIONS
Certified as a Wildlife Habitat

GREEN PRACTICES IMPLEMENTED
Alternative Fuel Usage for On-Site Fleet
Commingled Recycling
Green IT
Procured Local Food for On-Site Animals and/or Guest
Waterwise Landscaping
North Dakota

DAKOTA ZOO

Field Conservation
Are There Black-Footed Ferrets in Theodore Roosevelt National Park?
AZA FrogWatch USA
AZA Tiger SSP – Tiger Conservation Campaign
Bison Collaring Project – Theodore Roosevelt National Park
Black-Footed Ferret Population Monitoring in the Conata Basin, South Dakota
Field Conservation Interpretation For Dakota Zoo Visitors
Golden Eagle and Prairie Falcon Nest Surveys in Theodore Roosevelt National Park
Helping Communities Protect Snow Leopards
Mongolian Wild Horse Sustainability in Wild Project
Raptor Rehabilitation
Snow Leopard Trust (SLT) – Long-Term Ecological Study of Snow Leopards in Mongolia’s South Gobi Province
Support for Prairie Wildlife Research, Inc.
Transportation of SSP Animals Between Facilities

Green Practices
GREEN PRACTICES IMPLEMENTED
Composting (On-Site or Off-Site)

RED RIVER ZOO

Research
North Dakota State University (NDSU)
Potential Multi-Species Pregnancy Test

ROOSEVELT PARK ZOO

Education
Canvas, Corks, and Conservation
Family & Friends Snore N Roar
FrogWatch USA – Citizen Scientist
On-Site Outreach
Snore N Roar
Summer Zoo Camp

Ohio

AKRON ZOOLOGICAL PARK

Education
Career Programs
College Vet Day
Early Childhood Programs
Grizzly Bear Training Wall Talk
Learning Lab
On-Grounds Programs and Tours
Snooze at the Zoo
Wild World Animal Show
ZooCamp
ZooMobile

Field Conservation
American Association of Zoo Keepers (AAZK) – Cans for Corridors
AZA FrogWatch USA
AZA Tiger SSP – Tiger Conservation Campaign

Winter Zoo Camp
Zoo to You Outreach
Zoo Tots

Field Conservation
AZA FrogWatch USA
Black-Footed Ferret Spotlighting
Giraffe Conservation Alliance
Okapi Conservation Project
Saving Vanishing Species Stamp
Snow Leopard Trust (SLT)

Green Practices
GREEN PRACTICES IMPLEMENTED
Smart Building Strategies

Research
Nutrient Analysis of Frozen Browse
Greater Akron Audubon – Akron Zoo Christmas Bird Count
Humboldt Penguin Project: Punta San Juan, Peru
Instituto de Pesquisas Ecológicas (IPÊ)
IUCN/SSC Conservation Planning Specialist Group (CPSG)
Jaguar SSP
Madagascar Fauna and Flora Group (MFG)
Medina Raptor Center
Ohio Lights Out
Rebuilding the Pride – African Lion Conservation
Red Panda Network (RPN)
Red Wolf Coalition
Snow Leopard Trust (SLT)
Turtle Survival Alliance (TSA)
White-Winged Duck: Conservation Status and Site-Specific Threats to it in and Around Dehing Patkai Wildlife Sanctuary
Wildlife SOS

Green Practices

ENERGY
Documented Amount Spent
Documented Amount Used

FUEL
Documented Amount Spent
Documented Amount Used

GREEN CERTIFICATIONS
Certified as a Wildlife Habitat
Certified by the Green Restaurant Association
One or More Buildings LEED-Certified by the US Green Building Council

GREEN PRACTICES IMPLEMENTED
Alternative Fuel Usage for On-Site Fleet
Alternative Transportation Benefits for Staff
Building Energy Management
Carbon Offsets for Employee Travel
Commingled Recycling
Completed Greenhouse Gas Inventory
Composting (On-Site or Off-Site)
Diverted or Recycled Construction Waste
Energy Submetering
Generated Solar or Wind Energy
Graywater Reuse and/or Rainwater Harvesting
Green Building Policy/Commitment
Green IT
Green Purchasing Policy/Green Procurement
Procured Local Food for On-Site Animals and/or Guest
Purchased Carbon Offset(s) for On-Site Utility Use
Purchased Green Power or Renewable Energy Credits (RECs)
Smart Building Strategies
Stormwater Management Program
Wastewater Reduction
Water Submetering
Waterwise Landscaping

GREENHOUSE GAS EMISSIONS
Documented Amount of Greenhouse Gas Emissions

PLANS, POLICIES, AND BUDGETS
Dedicated a Line Item in the Budget for Green Practices
Developed or Updated a Sustainability Plan (or Equivalent)
Developed or Updated a Sustainability Plan
Specified a Portion of the Amount Saved for Next Year’s Green Practices

WATER
Documented Amount Spent
Documented Amount Used

Research
Akron Zoo – Hiram College Partnership
Eastern Carolina University White-Winged Wood Duck Genetics and Tuberculosis PCR Development

BOONSHOFT MUSEUM OF DISCOVERY

Field Conservation
AZA SAFE Fund
Sloth Conservation Foundation
CINCINNATI ZOO & BOTANICAL GARDEN

Education

Adult Programs
Advanced Inquiry Program
America Recycles Day
Barrows Conservation Lecture Series
Behind-the-Scenes Experiences
Blakely’s Barnyard Bonanza
Cat Ambassador Outreach Program
Center for Conservation and Research of Endangered Wildlife (CREW) Tours
Cheetah Encounter
Corporate Community Service Program
Earth Expeditions
Family Community Service Program
Family Programs
Go Bananas Cell Phone Recycling Challenge
Greater Cincinnati Environmental Educators (GCEE) Ultimate Educator Expo
Green Programs
Internships
Keeper Chats
Overnight Adventures
School Close Encounters
Seasonal Highlights
Self-Guided Activities & Tours for Schools
University of Cincinnati “At the Zoo” Courses
Wild Discover Zones
Wild Encounters
Wings of Wonder Bird Encounter
Wings of Wonder Outreach Program
Zoo Camp
Zoo on the Move – Community
Zoo on the Move – Schools
Zoo Troop
ZooTeens

Field Conservation

African Manatee Research and Conservation in Senegal
American Burying Beetle (ABB) Reintroduction Program
Asian Elephant Support (AES)
Autumn Buttercup (Ranunculus aestivalis) Reintroduction
Bird Strike Mitigation Program
Black-Footed Cat Working Group
Blue Throated Macaw
Botswana Predator Conservation Trust (BPCT)
Bowyer Farm Habitat Restoration
Enhancement of Gorilla Related In-Situ Conservation Education in Northern Democratic Republic of Congo
International Elephant Foundation (IEF) – Elephant Conservation Units in Sumatra
International Rhino Foundation (IRF) – Sumatran Rhino Conservation
IUCN/SSC Conservation Planning Specialist Group (CPSG)
Kea Conservation in New Zealand
Lights Out Cincinnati
Madagascar Tortoise Rescue
Manatee Rehabilitation Centre of Belize
Manatee Rescue and Rehabilitation Partnership (MRP)
Northern Wild Monkshood (Aconitum noveboracense)
Ocelot Conservation in Texas
Okapi Conservation Project
Pallas’ Cat Conservation
Pollen Nation
Propagation of Rugel’s Pawpaw for Restoration
Propagation of South Florida Ferns for Restoration
Raptor, Inc. – Local Raptor Rehabilitation
Rebuilding the Pride – African Lion Conservation
Red Panda Paintings
Sand Cat Conservation
Southern African Foundation for the Conservation of Coastal Birds (SANCCOB)
Survey for Rare Graptemys Species and Green Salamander in Northeastern Mississippi
Green Practices

ENERGY
- Documented Amount Spent
- Documented Amount Used
- Generated Renewable Energy On-Site

EXTERNAL SUPPORT
- Received Support From External Sources for Green Projects

FOOD
- Sourced Local Food or Grew it On-Site

FUEL
- Documented Amount Spent
- Documented Amount Used

GREEN CERTIFICATIONS
- Certified by the Green Restaurant Association
- One or More Buildings LEED-Certified by the US Green Building Council

GREEN PRACTICES IMPLEMENTED
- Alternative Fuel Usage for On-Site Fleet
- Building Energy Management
- Commingled Recycling
- Community-Based Sustainability Projects
- Completed Greenhouse Gas Inventory
- Denitrification Systems On Ground
- Diverted or Recycled Construction Waste
- Energy Submetering
- Generated Solar or Wind Energy
- Graywater Reuse and/or Rainwater Harvesting
- Green Building Policy/Commitment

Research
- African Painted Dog Reproduction Study
- An Evaluation of Putative Dinosaur Socio-Sexual Behaviour and its Implications for Paleobiology
- Aquatic Salamander Program
- Assessing Long-Term Stress in Great Apes: Allostatic Load in Bonobos (Pan paniscus)
- Assessment of Fecal Hormone Metabolites for Monitoring Reproductive Activity in a Captive Female Aye-Aye (Daubentonia madagascariensis)
- Association of Fecal Corticoid Concentrations With Clinical Avian Bornavirus in Kea
- AZA Gorilla Survey: Regurgitation/Reingestion and Diets
- Brazilian Jaguar Semen Banking and Artificial Insemination
- Characterization of Milk Composition in Gorillas Throughout Lactation
- Comparative Stable Isotope Analysis of Post-Consumed Food
- Comparison of Circulating Vitamin D 3 (25OHD) in Captive North American and Free-Ranging South African Black Rhinoceros (Diceros bicornis)
CLEVELAND METROPARKS ZOO

Education
Advanced Inquiry Program
Biomimicry
Break Camps
Career Day
Certified Interpretive Guide Training
Collaborative Inquiry Project
Connections to Africa
Conservation Leadership (Rhodes)
Docent Training
Educator Open House
Future for Wildlife Training
Life of Pi
NNOCCI Trainings
Rising Waters Adult Overnight Program
Rising Waters Overnight Program
Seasonal Interpreter Training
Summer Day Camp
Summer Day Camp Staff Training
Teacher Workshops
Tiger Tracks
Zoo Genetics
Zoo Tram Narration

Field Conservation
Africa and Asia Seed Grants
Amphibian Ark
Andean Bear Conservation Alliance
Asian Turtle Conservation Program
AZA Conservation Grants Fund (CGF)
AZA Puerto Rican Crested Toad SSP - Recovery Program
AZA Tiger SSP - Tiger Conservation Campaign
Bwindi Apes Conservation Education Partnership
Cheetah Conservation Fund (CCF) - Cheetah Conservation and Human Impact in Kenya
Combating Illegal Hunting and Wildlife Trafficking in Sabah
Conservación de la Naturaleza Amazónica del Perú (CONAPAC)

Development of a Rhino Ferritin Specific Assay for Monitoring the Progression of Iron Overload Disorder in Browsing Rhinos
Ecological Studies of Neotropical Primates
Effects of Laser and Swimming Treatments on Bumblefoot of Varying Severity in Little Blue Penguins
Exceptional Plant Signature Conservation Project
Genetic and Genomic Diversity of the Asian Elephant (Elephas maximus)
Genetic Diversity of Peter’s Angola Colobus Monkey Population in Northern Tanzania and in Accredited American Zoos
Great Ape Heart Project
Great Ape Heart Project (GAHP): Bonobo Blood Pressure Study
Identification of Differentially Expressed, Circulating microRNAs as Biomarkers for Diagnosing and Monitoring Iron Overload Disorder in Rhinos
Investigation of the Genetic Diversity and Ex-Situ Collection of Federally Threatened Lakeside Daisy
Large Cat Semen Banking and Artificial Insemination
Mating Behavior and Chemical Communication of Necturus Salamanders
Novel Assessments of Body Composition and Relation to Metabolic Status and Fat Stores in Asian Elephants
Orangutan Biographer Design Testing
Ovarian Cycle and Pregnancy Monitoring of the Common Hippopotamus (Hippopotamus amphibius) Through Salivary Analyses and Trans-Abdominal Ultrasound
Patterns of Diversity in the Indigenous Microbiota of Captive Mammals
Polar Bear Signature Conservation Project
Rhino Signature Conservation Project
Rhinoceros Iron Overload Disorder Research
Small Cat Signature Conservation Project
Social Relationships of and Reciprocity in Vampire Bats
The Variation in Musth Among Asian Elephants (Elephas maximus): Applications For Management and Conservation
Understanding Bumblefoot Through Behavioral Manipulations: Radio-Frequency ID Tags for Measuring Swimming Behavior in Little Blue Penguins (Eudyptula minor)
Use of Multiple Play Signals in Captive Immature Western Lowland Gorillas
Conservation Grants Administration
Eastern Gorilla Conservation – Capacity-Building, Gorilla Monitoring, and Core Support
Eastern Plains Gartersnake Conservation Project
Education for Nature – Vietnam
Employing Conservation Dogs to Help Fight Wildlife Trafficking in Africa
Evaluation of Body Condition and Glucose Metabolism as Part of the Health Assessment of Nubian Giraffe (Giraffa camelopardalis camelopardalis) During Conservation Translocation
Giraffe Conservation Foundation (GCF)
Human-Wildlife Conflict Collaboration/Center for Conservation Peacebuilding
IUCN/SSC Conservation Planning Specialist Group (CPSG)
Kinabatangan Orangutan Conservation Project
Little Fireface Project – Slow Loris Conservation
Madagascar Fauna and Flora Group (MFG)
Mbeli Bai Study (MBS) – Club Ebobo
Monitoring Wildlife Trade in the Wildlife Markets of Java and Bali
Operation: Stop Poaching Now
Red Panda Network (RPN)
Ruaha Carnivore Project (RCP)
Sea Turtle Research and Conservation in the Paria Peninsula, Sucre State, Venezuela
Snow Leopard Trust (SLT) – Natural Partnerships Program
The Amazon Center for Environmental Education and Research (ACEER) Foundation
TRAFFIC: The Wildlife Trade Monitoring Network
Tree Kangaroo Conservation Program
Turtle Survival Alliance (TSA)
UNITE for the Environment
University of Rwanda Memoirs Program
Using African Forest Elephant Behavioral Ecology to Inform Anti-Poaching Strategies
WildAid
Wildlife Conservation Society (WCS) – 96 Elephants – Anti-Poaching and Law Enforcement

Green Practices
GREEN PRACTICES IMPLEMENTED
Commingled Recycling
Composting (On-Site or Off-Site)
Generated Solar or Wind Energy
Green Purchasing Policy/Green Procurement
Procured Local Food for On-Site Animals and/or Guest

Research
CS2015-015 Effect of Meal Frequency on Biological Indicators of Inflammation and Glucose Metabolism, Fecal Microbiome, and Behavior in Cheetahs Housed at Cleveland Metroparks Zoo
CS2016-003 Developing Techniques for Studying Effects of a Novel Skin Disease on Locomotion in Giraffa camelopardalis
CS2016-009 Addendum to CS2015-011 Developing Assisted Reproductive Technologies in Freshwater Turtles
CS2016-014 The Impact of Diet on Sloth Bear Physiology, Health, and Behavior
CS2016-026 Learning and Behavior Outcomes Associated With Conservation Education Teacher Training in Communities Adjacent to Kibale National Park (UNITE) and Bwindi Impenetrable National Park (BACEP)
CS2016-027 Bear Behavior Monitoring
CS2017-009 Investigating Giraffe Behavior and Space Use in Relation to a Guest Feeding
CS2017-013 Effects of a Low Starch, High Fiber Diet on Health and Behavior of Orangutans at Cleveland Metroparks Zoo
CS2017-014 Gorilla Behavior and Health Monitoring
CS2017-016 Salivary Sample Request for Validation of Oxytocin Assay for Black Rhinoceros
CS2017-017 Urine Sample Request for Validation of Assays Leptin, Adiponectin, and C-Peptide for Gorillas
CS2017-019 Monitoring Effects of Anxiolytic Medication on Allen’s Swamp Monkey
CS2017-022 Which Methods of Quantifying Pacing Behavior Are Most Effective?
CS2017-026 Monitoring Behavioral and Physiological Indicators of Welfare in Several Species Moved to a Novel Zoo Environment
CS2017-036 Examining Adrenal Activity and Relationship to Reproductive Hormones and Behavior in a Female Matschie’s Tree Kangaroo

CS2017-038 Oxytocin as a Measure of Social Bond and Welfare in Western Lowland Gorillas in North American Zoos

CS2018-011 STEM Matters: Investigating the Confluence of Visitors and Institutional Agendas

CS2018-001 Reproductive Management of the Eastern Black Rhino

CS2018-002 Zoo Keeper/Aquarist Survey

CS2018-003 The Effects of Enclosure Choice on the Behavioral Welfare of Zoo-Housed Amur Tigers (Panthera tigris altaica)

CS2018-006 Investigation of the Relationship Between Oxalate Fermenting Gut Bacteria and Urolithiasis in Asian Small Clawed Otters in Human Care

CS2018-007 Effects of Two Novel Enrichment Strategies on the Welfare of a Zoo-Housed Giant Pacific Octopus (Enteropontus dofleini)

CS2018-010 Comparison of Circulating Vitamin D 3 (25OHD) in Captive North American and Free-Ranging South African Black Rhinoceros (Diceros bicornis spp.)

CS2018-014 An Examination of Welfare Indicators of a Zoo-Housed Green Tree Monitor (Varanus prasinus) in Response to Environmental Enrichment

CS2018-016 Geriatric Elephant Survey

CS2018-018 Evaluating Various Conservation Behaviors in Zoo Audiences: a Mixed Methods Study

Disease Surveillance of Cleveland Metroparks Deer Herds

Summer Experience Day Camp
Sunrise on the Savanna
Teacher Workshops
Teen Eco Summit
Twilight/Wildlights Tours
University Courses
VIP Tours
Wild Encounters Tours
Zoo School
ZooKids
ZooKids Seedlings
Zoombezi Bay Science Day

Field Conservation

Akagera National Park
Akagera National Park Rhino Trackers
American Bird Conservancy
Amphibian Ark
Asociación de Rescate y Conservación de Vida Silvestre (ARCAS)
AWF Protecting Black Rhino in Kenya
AZA Eastern Massasauga Rattlesnake SSP
Bat Conservation International
Boots on the Ground – Omo-Shasha-Oluwa
Brown Bear Conservation and Research Programme in a Model Area in Romania
Captina Conservancy – Hellbender Research and Assessment
Caribbean Manatee Conservation
Center for Conservation Peacebuilding (Formerly) Human-Wildlife Conflict Collaboration
Center for the Conservation of Tropical Ungulates – Assessment of the Lowland Tapir
Centre for Bat Research and Conservation
Cheetah Conservation Fund (CCF) – Cheetah Conservation Education and Community Outreach
Cheetah Outreach Trust – Conserving Southern Africa’s Free-Ranging Cheetah Through Farmer-Predator Conflict Mitigation
Club PAN (People, Animals, Nature): A Conservation Education Project of the Wild Chimpanzee Foundation Around the Tai National Park

COLUMBUS ZOO AND AQUARIUM

Education

Camp-Ins
Canvas for Conservation
Classroom Safari
Germain Keeper Talks
Homeschool Adventure Tours
Interpretive Contacts
Library Requests
Little Explorers’ Base Camp
Outreach
School’s Out Camps
Columbus Zoo Conservation
Connecting Zoo Professionals with Giraffe Conservation
Conserving the Endemic and Endangered Iringa Red Colobus Monkey
Dian Fossey Gorilla Fund International
Eastern Plains Garter Snake State Recovery Program
Elephants for Africa
Evaluating Local Community Sources of Intelligence for Tackling the Illegal Wildlife Trade
EWASO: Ecology and Conservation of Lions - Studying Factors Affecting the Population Dynamics in Northern Kenya
Fishing Cat Conservancy
Freshwater Mussel Conservation and Research Center
Giant Armadillo Project
Giraffe Conservation Foundation (GCF) - Conserving Africa’s Giraffe Through Research and Education
Hawk Conservancy: Combating Wildlife Poisoning Through Training in Southern Africa
Herpetofauna Responses to Reduced Impact Logging in Borneo
Hirola Conservation Programme
Integrating Science and Community Stewardship for Conservation of Critically Endangered Chinese Pangolins
International Elephant Foundation (IEF)
International Gorilla Conservation Program
International Iguana Foundation (IIF)
International Rhino Foundation (IRF)
International Rhino Foundation (IRF) - Black Rhino Conservation in Zimbabwe
J.A.C.K. Chimpanzee Sanctuary in Lubumbashi, DRC
Jane Goodall Institute - Release of Wild Born Mandrill
Kinabatangan Orangutan Conservation Project
Limbe Wildlife Centre
Little Fireface Project - Saving the Javan Slow Loris Through Ecology, Education, and Empowerment
Lola Ya Bonobo - Integrated Bonobo Conservation in the Democratic Republic of Congo
Lowland Tapir Conservation Initiative
Lwiro Primates (CRPL) Chimpanzee Habitat for Conservation and Education
Manatee Rescue and Rehabilitation Partnership (MRP)/Manatee Species Recovery Plan
Marine Mammal Center - Advancing Ocean Conservation Through Marine Mammal Rescue, Rehabilitation, Scientific Research, and Education
Misión Tiburón Conservation of the Hammerhead Shark and its Critical Habitats in Golfo Dulce
Monitoring Disease Threats for the Reintroduction of the Endangered Iberian Lynx in Extremadura
Mountain Gorilla Veterinary Project
New Nature Foundation - Vietnam
Nubian Giraffe Health Assessment During Relocation
Ohio Wildlife Center
Ohio Wildlife Center - Central Ohio Lights Out Program
Okapi Conservation Project
Orangutan Appeal UK
Painted Dog Conservation
Pan African Sanctuary Alliance - Education Components
Pan African Sanctuary Alliance (PASA)
People and Carnivores - Carnivore and Rangeland Conservation on the Rocky Mountain Front
Polar Bears International (PBI)
PROCETUS - Photo Identification of Cetaceans
Project Wildcat
Protecting Grevy’s Zebras in Northern Kenya
Raptors Botswana
Research and Community Outreach to Conserve Threatened Atlantic Forest Birds in Argentina
Rwanda Wildlife Conservation Association
Satellite Tracking and Social Behavior of the Bornean Elephant in Kinabatangan
Save the Tasmanian Devil Program
Sea Turtle Watch Liberia
SEXual COral REproduction (SECORE)
Snow Leopard Trust (SLT)
Snow Leopard Trust (SLT) - Long-Term Ecological Study of Snow Leopards in Mongolia’s South Gobi Province
Spatial and Temporal Patterns in the Occurrence of (Leopardus wiedii) Margay
Status and Conservation of Mecistops cataphractus in Obuasi Municipality
Supporting the Anti-Snaring Activities of the South Luangwa Conservation Society
Tacugama Chimpanzee Sanctuary
The Kasiisi Project
Tree Kangaroo Conservation Program
Turtle Conservation Project: Capacity Development Program in Sri Lanka
Turtle Survival Alliance (TSA)
Turtle Survival Alliance (TSA) - Central American River Turtle (Project Hicatee)
Uganda Wildlife Society
US Wildlife Trafficking Alliance
Vulture Conservation Programme (VulPro) – Cape Vulture Rehabilitation and Release
Walk the Line: Monitoring Animal Movement in Botswana Game Reserve
Wildlife Conservation Society – Beekeeping Project
Wildlife SOS Sloth Bear Attack Behavior and Behavioral Approach to Safety
WildSEAS Conservation

Green Practices

ENERGY
Documented Amount Spent
Documented Amount Used

EXTERNAL SUPPORT
Received Support From External Sources for Green Projects

FUEL
Documented Amount Spent
Documented Amount Used

GREEN CERTIFICATIONS
Certified by the Green Restaurant Association
One or More Buildings LEED-Certified by the US Green Building Council

GREEN PRACTICES IMPLEMENTED
Alternative Fuel Usage for On-Site Fleet
Alternative Transportation Benefits for Staff

Building Energy Management
Commingled Recycling
Community-Based Sustainability Projects
Composting (On-Site or Off-Site)
Denitrification Systems On Ground
Diverted or Recycled Construction Waste
Energy Submetering
Graywater Reuse and/or Rainwater Harvesting
Green Building Policy/Commitment
Green IT
Procured Local Food for On-Site Animals and/or Guest
Purchased Green Power or Renewable Energy Credits (RECs)
Smart Building Strategies
Stormwater Management Program
Water Submetering
Waterwise Landscaping

PLANS, POLICIES, AND BUDGETS
Dedicated a Line Item in the Budget for Green Practices

WASTE
Documented Amount Composted
Documented Amount Recycled
Documented Amount Sent to Landfill

WATER
Documented Amount of Wastewater Generated
Documented Amount Spent
Documented Amount Used

Research
Assessing Long-Term Stress in Great Apes: Allostatic Load in Bonobos
AZA Gorilla Survey: Regurgitation/Reingestion and Diet
Characterization of Haemonchus Parasitism at the Columbus Zoo
Comparative Serum Proteomics Project
Computerized Tomographic Evaluation of Hepatic Liver Concentration in Two Turtle Species
Developing Diagnostic Tools to Characterize African Tree Pangolin Growth and Development, Implications for Species Conservation, and Health Assessments
Evaluating SDMA as a Renal Insufficiency Marker in Captive Cheetahs (*Acinonyx jubatus*) Through the Design of an Iohexol Clearance
Integration of a Bachelor Elephant Herd: Behavior, Endocrine, and Physiological Monitoring
Investigating the Composition of Milk of Apes
Orangutan Growth, Development, and Reproductive Strategies
Prosimian Biomedical Research Project
Quantitatively Measuring Welfare of Black Footed Penguins (*Spheniscus demersus*) Based on the ‘Five Domains Model’ and the AZA Animal Welfare Template
Quantitatively Measuring Welfare of Cheetahs Based on the ‘Five Domains Model’ and the AZA Animal Welfare Template
Quantitatively Measuring Welfare of Macaws Based on the ‘Five Domains Model’ and the AZA Animal Welfare Template
Spatial Relationships and Allostatic Load in Western Lowland Gorillas
Stress Levels and Behavioral Responses in North American Cougars (*Puma concolor*) in Human Care
Understanding Asian Elephant Welfare and Behavior After Zoo Hours
Variation in Musht Among Asian Elephant Applications for Management and Conservation

**THE WILDS**

**Education**

Education/Youth Safari
Homeschool Programs
Kids’ Discovery Field Station
Outreach
Overnights
WildeCamp

**Field Conservation**

Assessing Grassland Bird Diversity in The Wilds Bison Grazed Pastures
Assessing the Vegetation Community of Reclaimed Grasslands at The Wilds
Augmenting Barn Owl Nesting Opportunities
Bat Acoustic Surveys

Building Conservation Capacity for Future Restoration
Cavity Nester Usage of Nest Boxes and Reproduction on a Reclaimed Surface Coal Mine
Comparing Microclimate Suitability for Terrestrial Salamanders Between Remnant and Reclaimed Forest
Conservation Genetics and Population Structure of Two Garter Snake Species in Western Montana
Control of Invasive Species Across the Landscape
Detecting the Endangered Mussel Carolina Heelsplitter Using eDNA Surveys
Determination of Eastern Hellbender Presence in Ohio Utilizing Environmental DNA (eDNA)
Determination of Predator-Avoidance Conditioning Techniques for Headstarted Eastern Hellbenders
Evaluation of Beaver Community at The Wilds
Evaluation of Miller Valley Wetland Following Restoration
Habitat Modeling of Loggerhead Shrike
Habitat Variables Associated With Meso-Predator Distribution and Abundance on a Reclaimed Surface Mine Using Camera Traps
Habitat Variables Associated With Salamander Distribution and Abundance on a Reclaimed Surface Mine
Headstarting Operations for Eastern Hellbenders
Improving Hardwood Forests Through Invasive Species Control
Long-Term Lepidopteran Surveys and Pollinator Habitat Enhancement
Miller Valley Stream Restoration
Monarch Butterfly Conservation
Monitoring the Health of the Miller Stream: An Assessment of Macroinvertebrate Communities
Native Bee Diversity and Abundance on Reclaimed Surface Mine Land
Native Taxon Inventories
Natives in Reclamation
Prairie Creation, Restoration, and Management of Native Plant Communities
Przewalski Horse and Onager Reproduction
Reforestation of Reclaimed Grasslands
Reintroduction of American Burying Beetles to Ohio
Scat Surveys for Genetic Identification and Diet Analysis of Carnivores on a Reclaimed Surface Coal Mine
Snake Fungal Disease
Surveying for Wintering Raptor Presence and Abundance Across Multiple Habitat Types at Reclaimed Coal Mines
Testing a Detection Dog Survey for the Black-headed Bushmaster in Costa Rica
Testing Prairie for Biomass and Carbon Sequestration on Reclaimed Mine Land
Using Soil eDNA to Test for Presence of Terrestrial Salamanders
Utilizing Fire Management to Maintain Prairie Ecosystems
Variables Associated With Artificial Vernal Pool Utilization by Spring-Breeding Amphibians on a Reclaimed Surface Mine

TOLEDO ZOO & AQUARIUM

Education
Animal Contact Yard
Animal Demonstrations
Behind-the-Scenes Tours
Birthday Party Animal Demonstrations
Bug Festival
Camps
Climate Change Symposium
Distance Learning
Dive Show Interpretation
Elephant Exhibit Inquiry Kiosks
Fisher-Price Amphitheater Show
Homeschool Programs
iEvolve With STEM
Junior Zookeeper
Nature’s Neighborhood
Nature’s Neighborhood Free Play Workshop
Ocean Lab
On Grounds School Programs
Outreach Programs
Overnight Programs
Party for the Planet
Play Naturally Toledo
Pop Up/Backyard Activities
Preschool

Field Conservation
Aruba Island Rattlesnake Field Research
Conservation of the Kihansi Spray Toad
Ecology of the Cuban Boa on the United States Naval Base, Guantanamo Bay, Cuba
Great Lakes Piping Plover Recovery Effort – Salvage Rearing
Kirtland’s Snake Monitoring and Assessment
Koala Education and Conservation
Maumee River Lake Sturgeon Rearing Facility
Mitchell’s Satyr Reintroduction Program
Monarch Butterfly Rearing and Release
Native Orchid Conservation
Northwest Ohio Canid Assessment
Ohio Hellbender Headstart and Reintroduction
Ohio Turtle Survey and Monitoring
On-Grounds Biodiversity Monitoring
Pacific Bird Conservation/Mariana Avifauna Conservation (MAC)
Polar Bear Conservation Initiatives
Reintroduction of the Karner Blue Butterfly to the Oak Openings of Northwestern Ohio
Rewilding of Urban Brownfields With Prairie Installations
Santa Cruz Ground Dove Conservation
Save the Tasmanian Devil Program
Scaly-Sided Merganser Task Force
Snow Leopard Conservation in Kyrgyzstan
Wyoming Toad Field Surveys
Zooteen Field Conservation Efforts
Green Practices
GREEN PRACTICES IMPLEMENTED
Building Energy Management
Commingled Recycling
Community-Based Sustainability Projects
Composting (On-Site or Off-Site)
Diverted or Recycled Construction Waste
Generated Solar or Wind Energy
Graywater Reuse and/or Rainwater Harvesting
Smart Building Strategies
Stormwater Management Program
Water Submetering
Waterwise Landscaping

TOLEDO ZOOLOGICAL GARDENS
Green Practices
ENERGY
Generated Renewable Energy On-Site
Purchased Renewable Energy
EXTERNAL SUPPORT
Received Support From External Sources for Green Projects
FUEL
Documented Amount Spent
Documented Amount Used
PLANS, POLICIES, AND BUDGETS
Developed or Updated a Sustainability Plan (or Equivalent)
Developed or Updated a Sustainability Plan

Oklahoma

OKLAHOMA CITY ZOO AND BOTANICAL GARDEN
Education
Animal Presentations
Day Camps/Summer Camps
Nature Explorers Preschool
Overnight Programming
Schools/On Grounds
Schools/On Grounds GRANTS
Scout Badge Programs
Tuition/Family Classes
Zoomobiles – Outreach
Zoomobiles – Outreach Grants

Field Conservation
American Association of Zoo Keepers (AAZK) – Bowling for Rhinos
American Bird Conservancy
AZA Conservation Grants Fund (CGF)
AZA Komodo Dragon SSP
AZA Tiger SSP – Wildlife Conservation Society (WCS) – Sumatran Tiger Conservation Project
Belize Foundation for Research and Environmental Education
Connecting Wildlife Through Zambia’s Transboundary Wildlife Movement Corridors in the Kavango Zambezi Tranfrontier Conservation Area (KAZA TFCA)
Conservation Ambronia
Conserving Grauer’s gorilla in the Mwana Valley of Itombwe Natural Reserve, Democratic Republic of Congo
CrocFest
Dama Gazelle Conservation
Dian Fossey Gorilla Fund International
Diversity = Resilience: Marine Conservation in Urban Schools
Ecology, Conservation, and Reintroduction of Central American River Turtles
Giraffe Conservation Foundation (GCF)
International Otter Survival Fund
International Rhino Foundation
Jatun Sacha Foundation
Kedestes Butterfly Conservation Project
Monarch Butterfly
Monarch Watch
Northern Rangelands Trust – Conservancies Support
Okapi Conservation Project
Oklahoma Department of Wildlife Conservation
Painted Dog Research Trust
Pan African Sanctuary Alliance
Reintroduction Strategy for Radiated Tortoises
Seafood Watch
Snapshot Safari
Texas Horned Lizard Behavioral Ecology and Reintroduction
The Nature Conservancy – Oklahoma Chapter
Turtle Survival Alliance (TSA)
Warriors Protecting Grevy’s Zebra in Laisamis, Northern Kenya

Green Practices

ENERGY
Documented Amount Spent
Documented Amount Used

FUEL
Documented Amount Spent

GREEN CERTIFICATIONS
Certified as a Wildlife Habitat

GREEN PRACTICES IMPLEMENTED
Alternative Fuel Usage for On-Site Fleet
Building Energy Management
Commingled Recycling
Composting (On-Site or Off-Site)
Energy Submetering
Graywater Reuse and/or Rainwater Harvesting
Waterwise Landscaping

PLANS, POLICIES, AND BUDGETS
Dedicated a Line Item in the Budget for Green Practices
Developed or Updated a Sustainability Plan

WATER
Documented Amount of Wastewater Generated

Research
A Study of Dominance Hierarchies in African Painted Dog
Blood Coagulation Assessment of Captive Asian Elephants (Elephas maximus)
Post-Occupancy Evaluation of Sanctuary Asia: Animal, Staff, and Visitor Responses
Small Mammal Survey
Social Behavior and Activity Budget of Orangutans at the Oklahoma City Zoo
Variation in Musth Among Asian Elephants (Elephas maximus): Applications for Management and Conservation

TULSA ZOO
Field Conservation
American Burying Beetle Project
AZA Tiger SSP – Tiger Conservation Campaign – Endau-Rompin Landscape of Peninsular Malaysia
Berdiri Foundation Elephant Response Unit – Way Kambas
International Elephant Foundation (IEF)
International Rhino Foundation (IRF) – Operation: Stop Poaching Now
Mabula Ground Hornbill Project (MGHP)
Monarch Butterfly Watch Program and Waystation Program
Monarch Initiative of Tulsa
Save the Wild Chinchillas
Seafood Watch – Conservation Partner
Snow Leopard Trust (SLT) – Natural Partnerships Program
Southern African Foundation for the Conservation of Coastal Birds (SANCCOB)
The Scarlet Macaw Population Recovery Program
West African Primate Conservation Action – Creation and Management of a Community-Protected Forest on the Border of Ghana and Côte d’Ivoire to Promote Conservation of Endemic Wildlife and Habitat
Wild Nature Institute
Green Practices

ENERGY
Documented Amount Spent
Documented Amount Used

FOOD
Sourced Local Food or Grew it On-Site

FUEL
Documented Amount Spent
Documented Amount Used

GREEN PRACTICES IMPLEMENTED
Commingled Recycling
Community-Based Sustainability Projects
Composting (On-Site or Off-Site)
Diverted or Recycled Construction Waste
Generated Energy through Anaerobic Digester
Green IT
Procured Local Food for On-Site Animals and/or Guest
Purchased Carbon Offset(s) for On-Site Utility Use
Stormwater Management Program
Used Enterprise (IT) Solutions to Track and Measure Sustainability Performance
Waterwise Landscaping

GREENHOUSE GAS EMISSIONS
Documented Amount of Greenhouse Gas Emissions

PLANS, POLICIES, AND BUDGETS
Dedicated a Line Item in the Budget for Green Practices
Developed or Updated a Sustainability Plan (or Equivalent)
Developed or Updated a Sustainability Plan

WASTE
Documented Amount Composted
Documented Amount Recycled

WATER
Documented Amount Spent
Documented Amount Used

Research
Comparing Cortisol Levels to Behavior in Female Grizzly Bear in Captivity
Osteohistological Research to Build an Osteohistology Thin Section Database
Pharmacokinetics of Rectally and Orally Administered Levofloxacin in Asian Elephants (Elephas maximus)
The National Elephant Herpesvirus Laboratory (NEHL)
Understanding the Neurological Evolution of Bird Flight

Oregon

OREGON COAST AQUARIUM

Education
Adult Volunteer Interpreters
Animal Encounters
Aqua Tots
Behind the Scenes Tour
Behind the Scenes Tours – Careers
Biofact Carts
Coastal Learning Symposium
Day Events
Dive Interpretation Presentations
Guest Displays
Job Shadows
Lab Programs
Magic Moments
Ocean Literacy Initiative
Oceanscape Network
Oregon Coast Education Partnership
Outreach
Passages Discovery Zone
Plankton Station
Public Animal Feedings
Sleepovers
Virtual Explorations
Volunteer Guided Walks
Volunteer Interpreter Training
Waterlines
Youth Volunteer Interpreters

Field Conservation
Monitoring Transplanted Eelgrass (Zostera Marina) in a Newly Created Inter-Tidal Habitat
Oregon Marine Reserves
Sea Otter Disaster Plan
Wildlife Rehabilitation

Green Practices
ENERGY
Documented Amount Spent
Documented Amount Used

GREEN CERTIFICATIONS
Certified as a Wildlife Habitat

GREEN PRACTICES IMPLEMENTED
Commingled Recycling
Composting (On-Site or Off-Site)
Energy Submetering
Waterwise Landscaping

WATER
Documented Amount Spent
Documented Amount Used

Research
Crafting Actionable Messages About Marine Plastic Pollution at the Oregon Coast Aquarium

OREGON ZOO
Education
Behind the Scenes Tours
Camp Programs
Education Center Partner Programs
Headstart ZooMobile
Insect Zoo
Teacher Partnerships
Teacher Professional Development

Urban Nature Overnights (UNO)
Wildlife Live Show
Zoo Ambassadors
Zoo Animal Presenters (ZAP) – First Year
Zoo Guides
Zoo School/Zoo To You
Zoo Teens (General)
ZooSnooze – Overnights Program
ZooTeens – Conservation Corps

Field Conservation
Action for Cheetahs in Kenya
American Association of Zoo Keepers (AAZK) – Bowling for Rhinos
AZA FrogWatch USA
AZA Tiger SSP – Tiger Conservation Campaign
California Condor Breeding Program
Cascades Pika Watch
Cheetah Conservation Fund (CCF)
Forest Elephant Conservation in Borneo
Future for Wildlife Field Conservation Grant Program
HUTAN-Kinabatangan Orang-Utan Conservation Project
International Rhino Foundation (IRF)
IUCN/SSC Conservation Planning Specialist Group (CPSG)
Kasese Wildlife Conservation Awareness Organization
Long-Term Reproductive Hormone Monitoring of Asian Elephants
Northern Leopard Frog Recovery
Oregon Silverspot Butterfly (Speyeria zerene hippolyta)
Cascade Head Population Supplementation
Oregon Zoo Conservation Crew
Orphan Cougar Placement
Painted Dog Conservation (PDC)
Panthera
Polar Bear Metabolic, Nutrition, and Accelerometer Behavior Studies in Support of Field Conservation Efforts
Polar Bears International (PBI)
Pygmy Rabbit (Brachylagus idahoensis) Captive Care and Breeding
SaveNature.Org
Taylor’s Checkerspot Captive Rearing and Release Program, Oregon
Taylor’s Checkerspot Captive Rearing and Release Program, Washington State
Vulture Conservation Programme (VulPro)
Western Pond Turtle Headstarting
Wildlife and Lead Outreach Program
Zoo Animal Presenters (ZAP) Conservation Work
Zoo Teen Conservation Corps
Zoo-Quatama Partnership

Green Practices

ENERGY
Documented Amount Spent
Documented Amount Used
Generated Renewable Energy On-Site
Purchased Renewable Energy

EXTERNAL SUPPORT
Received Support From External Sources for Green Projects

FOOD
Sourced Local Food or Grew it On-Site

FUEL
Documented Amount Spent
Documented Amount Used

GREEN CERTIFICATIONS
Certified by the League of American Bicyclists
One or More Buildings LEED-Certified by the US Green Building Council

GREEN PRACTICES IMPLEMENTED
Alternative Fuel Usage for On-Site Fleet
Alternative Transportation Benefits for Staff
Alternative Transportation Discounts for Guests
Building Energy Management
Commingled Recycling
Completed Greenhouse Gas Inventory
Composting (On-Site or Off-Site)
Diverted or Recycled Construction Waste

Energy Submetering
Generated Solar or Wind Energy
Graywater Reuse and/or Rainwater Harvesting
Green Building Policy/Commitment
Green Purchasing Policy/Green Procurement
Procured Local Food for On-Site Animals and/or Guest
Purchased Green Power or Renewable Energy Credits (RECs)
Smart Building Strategies
Stormwater Management Program
Used Enterprise (IT) Solutions to Track and Measure Sustainability Performance
Wastewater Reduction
Water Submetering
Waterwise Landscaping

GREENHOUSE GAS EMISSIONS
Documented Amount of Greenhouse Gas Emissions

PLANS, POLICIES, AND BUDGETS
Dedicated a Line Item in the Budget for Green Practices
Developed or Updated a Sustainability Plan (or Equivalent)
Developed or Updated a Sustainability Plan

WASTE
Documented Amount Composted
Documented Amount Recycled
Documented Amount Sent to Landfill

WATER
Documented Amount of Wastewater Generated
Documented Amount Spent
Documented Amount Used

Research
Animal Behavior Audit Program
Asian Elephant Hormone Monitoring
Continued Pharmacokinetic Study to Investigate the Potential Use of Nebulized Terbinafine: an Antifungal in Treating Shell Disease in Western Pond Turtles
EEHV Consortium at the National Elephant Herpesvirus Laboratory Research Partner
Pilot Pharmacokinetic Study to Investigate the Potential Use of Terbinafine in Western Pond Turtles
Research Support: Biomaterial Requests (Review and Completion)
Role of Mate Choice in Reproductive Success of Taylor’s Checkerspot Butterfly
The Role of Noise in Zoo Animal Health

WILDLIFE SAFARI
Field Conservation
Cheetah Conservation Fund (CCF)
Costa Rica Animal Rescue Center
International Elephant Foundation (IEF)
International Rhino Foundation (IRF)
Wildlife Conservation Network (WCN)

Green Practices
ENERGY
Documented Amount Spent
Documented Amount Used

FUEL
Documented Amount Spent
Documented Amount Used

GREEN PRACTICES IMPLEMENTED
Commingled Recycling
Composting (On-Site or Off-Site)
Diverted or Recycled Construction Waste
Graywater Reuse and/or Rainwater Harvesting
Green IT

WATER
Documented Amount of Wastewater Generated

Pennsylvania

CLYDE PEELING’S REPTILAND

Field Conservation
AZA Crocodilian Advisory Group (CAG) – Conservation Fund
AZA Komodo Dragon SSP – Conservation Fund
Campaign for Hellbender Conservation
Merill Linn Land and Waterways Conservancy
Turtle Survival Alliance (TSA)

ELMWOOD PARK ZOO

Field Conservation
American Association of Zoo Keepers (AAZK) – Bowling for Rhinos
AZA Jaguar SSP – Cockscomb Basin Wildlife Reserve
Centro Chaqueño para la Conservación e Investigación (CCCI)
Pennsylvania Audubon Society
Proyecto Titi - Titi Conservation Alliance
Red Panda Network (RPN)

Green Practices

ENERGY
Documented Amount Spent
Documented Amount Used

FUEL
Documented Amount Spent
Documented Amount Used

GREEN PRACTICES IMPLEMENTED
Commingled Recycling
Composting (On-Site or Off-Site)
Diverted or Recycled Construction Waste
Graywater Reuse and/or Rainwater Harvesting
Green IT

WATER
Documented Amount of Wastewater Generated

ERIE ZOO

Education
Adult Programs
Animal Meet and Greets
Behind the Scenes Tours
Birthday Parties
Day Camps
Family Programs
Homeschooler ZooSchool Club
Job Shadows
Junior Zookeeper
Meet a Keeper Talks
On-Site Classroom Programs
Outreach
PreZooSchool
Scout Programs
Touch Tables
Volunteer Program
Zoo Tots
ZooSchool Classes

Field Conservation
Amphibian TAG
Giraffe Conservation Foundation (GCF)
Hawk Creek Rehabilitation
International Rhino Foundation (IRF)
International Rhino Keepers Association
Northern Jaguar Project
Orangutan Conservancy
Painted Dog Conservation
Red Panda Network (RPN)
Southern African Foundation for the Conservation of Coastal Birds (SANCCOB)
Tamarack Wildlife Rehabilitation Center
Wildcat Conservation Alliance

Research
Heterozygosity of Captive Burmese Starred Tortoises (Geochelone platynota)
New Bolten Center
The Cognitive Capabilities of the Siamang (Symphalangus syndactylus)

LEHIGH VALLEY ZOO
Green Practices
GREEN PRACTICES IMPLEMENTED
Commingled Recycling
Green Purchasing Policy/Green Procurement

NATIONAL AVIARY
Field Conservation
Connectivity of Migratory Populations of the Louisiana Waterthrush
Conservation of Birds in Cacao Plantations
Conservation of the Andean Condor
Effects of Anthropogenic Activities on Birds in Polylepis Fragments, Cloud Forest, and Exotic Tree Plantations in the Ecuadorian Andes
Factors Affecting Reproductive Success and Overwintering Survival of a Riparian-Obligate Migratory Bird
Guam Rail SSP – Breeding and Reintroduction
Hummingbird Network
Impacts of Natural Gas Development on an Indicator Species
Las Cruces Area, Costa Rica Avian Monitoring Program
Marianas Avian Conservation Program (MAC)
Monitoring Birds in the Sierra de Bahoruco
Monitoring Peregrine Falcon Nesting Sites in Pittsburgh
Pittsburgh Neighborhood Nestwatch
Pittsburgh Project Owlnet
RBURG

Green Practices
ENERGY
Documented Amount Spent
Documented Amount Used
FOOD
Sourced Local Food or Grew it On-Site
FUEL
Documented Amount Spent
GREEN PRACTICES IMPLEMENTED
Commingled Recycling
Community-Based Sustainability Projects
Diverted or Recycled Construction Waste
Purchased Green Power or Renewable Energy Credits (RECs)
PLANS, POLICIES, AND BUDGETS
Dedicated a Line Item in the Budget for Green Practices
Developed or Updated a Sustainability Plan (or Equivalent)
Developed or Updated a Sustainability Plan

WASTE
Documented Amount Composted

WATER
Documented Amount Spent
Documented Amount Used

PHILADELPHIA ZOO

Education
Animal Training Demos
Animals in the Classroom
Barnyard
Behind the Scenes Tours
CAP (Community Access Programs)
Daytime Seasonal Events
Docent Tours
Docent Training Course
Evening Rentals/Events
Insect Barn
Interpretation Carts
Interpreters
KidZooU Climbing Structure
Little Zoo on Wheels
McNeil Avian Center Rainforest
Member Morning Strolls
New Volunteer Orientation
Overnights
Reptile Exercise Yard
Scout Badge Activity
Teacher Pass
Unless Contest
Wildlife Discovery Tours
Wings of Asia
You Belong in the Zoo

Zoo on Wheels
ZooCREW

Field Conservation
Amphibian Ark
AZA FrogWatch USA
Finding Lost Frogs of Ecuador
Golden Lion Tamarin Conservation Program
Haitian Frog Rescue
Rodrigues Environmental Education Project
Saving Endangered Frogs of Haiti
Snow Leopard Trust (SLT)
Zoo Amaru – Amphibian Conservation Center

Green Practices

ENERGY
Documented Amount Spent
Documented Amount Used
Generated Renewable Energy On-Site
Purchased Renewable Energy

EXTERNAL SUPPORT
Received Support From External Sources for Green Projects

FOOD
Sourced Local Food or Grew it On-Site

FUEL
Documented Amount Spent
Documented Amount Used

GREEN CERTIFICATIONS
Certified as a Wildlife Habitat
One or More Buildings LEED-Certified by the US Green Building Council

GREEN PRACTICES IMPLEMENTED
Building Energy Management
Commingled Recycling
Community-Based Sustainability Projects
Completed Greenhouse Gas Inventory
Composting (On-Site or Off-Site)
Diverted or Recycled Construction Waste
Energy Submetering
Graywater Reuse and/or Rainwater Harvesting
Green Building Policy/Commitment
Green IT
Green Purchasing Policy/Green Procurement
Procured Local Food for On-Site Animals and/or Guest
Purchased Green Power or Renewable Energy Credits (RECs)
Smart Building Strategies
Stormwater Management Program
Used Enterprise (IT) Solutions to Track and Measure Sustainability Performance
Wastewater Reduction
Water Submetering
Waterwise Landscaping

GREENHOUSE GAS EMISSIONS
Documented Amount of Greenhouse Gas Emissions

PLANS, POLICIES, AND BUDGETS
Dedicated a Line Item in the Budget for Green Practices
Developed or Updated a Sustainability Plan (or Equivalent)
Developed or Updated a Sustainability Plan
Specified a Portion of the Amount Saved for Next Year’s Green Practices

WASTE
Documented Amount Composted
Documented Amount Recycled
Documented Amount Sent to Landfill

WATER
Documented Amount of Wastewater Generated
Documented Amount Spent
Documented Amount Used

Research
Description of an Acoustic Assemblage of Frogs and the Discovery of Two New Frog Species (Adenomera spp.) From Putumayo, Colombia

PITTSBURGH ZOO & PPG AQUARIUM
Green Practices
GREEN PRACTICES IMPLEMENTED
Alternative Fuel Usage for On-Site Fleet
Commingled Recycling
Composting (On-Site or Off-Site)
Generated Solar or Wind Energy
Graywater Reuse and/or Rainwater Harvesting
Purchased Green Power or Renewable Energy Credits (RECs)
Waterwise Landscaping

ZOOAMERICA NORTH AMERICAN WILDLIFE PARK
Education
After-Hours Tour
Animal Encounter
Animal Tales
Early Bird Tour
Falconry Experience
Job Shadow
Outreach
Photography Tour
Public Programs – Seasonal
Special Event – Creatures of the Night
Special Event – Party for the Planet
Sweet Access Experience
Tours – Guided
Wild Winter Adventure
ZooCamp – Middle School
ZooCamp – Preschool Age
ZooCamp – School Age
ZooCrew Camp – High School Age

Field Conservation
AZA Conservation Grants Fund (CGF)
Barn Owl Nest Box
Monarch Butterfly Tagging
Regal Fritillary Conservation
Rhode Island

ROGER WILLIAMS PARK ZOO

**Education**
- Advanced Course Network
- Adventures ZooCamp
- Afterschool Programs
- Amazon Adventures Movie
- Ambassador Animal Encounters
- AMP RI-Marketing Meeting
- Animal Care Internship
- Armadillo Encounters
- BioBlitz
- BioBlitz Information Session
- Birthday Parties
- Breakfast With the Animals
- Bronx Zoo Trip
- Brown University SPARK
- Central Falls H.S. Program
- Collette Travel Information Sessions
- Community Zoomobiles
- Conservation Heroes ZooCamp
- Contact Yard
- Counselor Trainings & Team Building
- Cranston Summer Program
- Docent Ambassadors
- Docent Training Class
- Docent Zoomobiles
- Dream Night
- Eco Agents
- Elephant Barn Interpretation
- Exhibit Informal Interpretation
- FrogWatch USA
- Giraffe & Seal Feedings
- Hasbro Children’s Hospital Animal Therapy
- Homeschool
- JOLS (Jack-O-Lantern Spectacular) Theme Nights
- Jr. Docent Training Series
- Members Night
- Nature Swap
- Opt Out Day – Black Friday
- Our Big Back Yard Areas and Beyond the Fence
- Party for the Planet
- Pawtucket Boys and Girls Club Summer Program
- Pets & Vets
- Play Partner Training
- Preschool Adventures
- Rise and Play Sensory Friendly Mornings in the Big Backyard
- Rock & Roar Concerts
- Saki Monkey Gender Reveal
- School Zoomobiles On & Off Grounds
- Scout Safari Day
- Snore & Roar Overnights
- Sponsor Night JOLS (Jack-O-Lantern Spectacular)
- Spooky Zoo
- Tadpole Academy ZooCamp
- Teacher Institute
- Teacher Workshops on Play
- University of Rhode Island Animal Management Course
- Urban Nature Explorers
- Wild Bunch Show
- Wild Bunch Training
- Woonsocket Summer Program
- Yoga With the Elephants
- Youth Advisory Counsel
- Zoo Career Workshop
- ZooCamp Newsletters

**Field Conservation**
- American Burying Beetle (*Nicrophorus americanus*) Captive Propagation and Reintroduction Program
- AZA Conservation Grants Fund (CGF)
- AZA FrogWatch USA
- AZA Komodo Dragon SSP
- Can the Federally Endangered American Burying Beetle be Successfully Reintroduced in New York? Habitat Suitability Assessments Based Upon Community Composition of Burying Beetles (*Nicrophorus* spp.)
Received Support From External Sources for Green Projects

Sourced Local Food or Grew It On-Site

Documented Amount Spent

Documented Amount Used

Alternative Fuel Usage for On-Site Fleet

Building Energy Management

Commingled Recycling

Composting (On-Site or Off-Site)

Generated Solar or Wind Energy

Green Purchasing Policy/Green Procurement

Stormwater Management Program

Water Submetering

Waterwise Landscaping

Dedicated a Line Item in the Budget for Green Practices

Developed or Updated a Sustainability Plan (or Equivalent)

Developed or Updated a Sustainability Plan

Documented Amount Composted

Documented Amount Recycled

Documented Amount Sent to Landfill

Are We Expecting? Developing a Test for Early Pregnancy Detection in Captive Snow Leopards (*Panthera uncia*)

Utilizing Pre-Recorded Video to Quantify African Elephant Behavior
South Carolina

**BROOKGREEN GARDENS**

**Education**
- Children’s Activity Days
- Day Camps
- Meet the Animals
- Mother Nature’s Café
- School Field Trip Programs
- Zoo to You Outreach Programs
- Zookeeper for a Day

**Field Conservation**
- Audubon Climate Watch Project
- Backyard Habitat Restoration
- Grow and Propagate Sea Beach Amaranth (*Amaranthus pumilus*)
- Restoration and Monitoring of Wood Duck Houses Along Brookgreen Gardens Waterways
- Restoring and Repairing Bluebird Houses to Encourage Breeding
- Sea Turtle Nest Monitoring at Huntington Beach State Park

**Green Practices**

**ENERGY**
- Documented Amount Spent
- Documented Amount Used

**FOOD**
- Sourced Local Food or Grew it On-Site

**FUEL**
- Documented Amount Spent
- Documented Amount Used

**GREEN CERTIFICATIONS**
- Certified as a Wildlife Habitat

**GREEN PRACTICES IMPLEMENTED**
- Building Energy Management
- Commingled Recycling

**GREENVILLE ZOO**

**Education**
- Behind the Scenes – Backstage Expeditions
- Career Day
- City Appreciation Night
- Distance Learning Programs at the Zoo

**Field Conservation**
- ARCS Education and Outreach Workshops
- AZA Conservation Grants Fund
- AZA FrogWatch USA/ Frogwatch Researchers Of Greenville Zoo (F.R.O.G.Z.)
- AZA SAFE
- California Wolf Center
- Community-Based Conservation of Endangered Sea Turtles Nesting Along Akassa Coast, Bayelsa Nigeria
- Community-Based Habitat Restoration for the Critically-Endangered Guatemalan Beaded Lizard (*Heloderma charlesbogerti*)
- Current Status and Conservation of Persian Leopard (*Panthera pardus ciscaucasicus*) in Dagestan, Russia
- Ecological Drivers of Spatial Clustering in Social Behavior in Critically-Endangered Diademed Sifaka (*Propithecus diadema*) in a New Protected Area
- Florida Panther Conservation – Captive Management Group
From Conflict to Coexistence: Investigating Drivers of Leopard-Livestock Conflict and Suitable Husbandry Techniques
International Rhino Foundation
Kids for Compassionate Conservation – Pan African Sanctuary Alliance
Long-Term American Alligator Feeding Behavior in Coastal South Carolina
Madagascar Fauna and Flora Group (MFG)
Maternal Transfer of Radiocesium in *Nerodia floridana* (Florida Green Watersnake)
Multidisciplinary Mapping: Toward a Better Understanding of Human-Carnivore Conflict and Landscape Use by Carnivores and People
Pine Snakes of Glade Farms: A Stronghold for a Vanishing Species?
Save the Frogs
Sumatran Orangutan Conservation Programme (SOCP)
Tigers Always
Training Local Scientists in Guyana
Using Wildlife Genetics to Alleviate Human-Carnivore Conflict in Tanzania
Wildcats Conservation Alliance
Xerces Society for Invertebrate Conservation
Zoo Conservation Outreach Group (ZCOG)
Zoo Conservation Outreach Group (ZCOG) – Anteaters and Highways

**Green Practices**

**ENERGY**
Documented Amount Used

**FOOD**
Sourced Local Food or Grew it On-Site

**FUEL**
Documented Amount Spent
Documented Amount Used

**GREEN PRACTICES IMPLEMENTED**
Commingled Recycling

**PLANS, POLICIES, AND BUDGETS**
Developed or Updated a Sustainability Plan

**WATER**
Documented Amount Used

**Research**
Monitoring Black Rat Snakes on the Greenville Zoo Campus
Turtle Trapping Project

**RIPLEY’S AQUARIUM IN MYRTLE BEACH**

**Field Conservation**
Beach Sweep
Sea Turtle Conservation

**Research**
Macrobacterial Infections in Seadragons
Mycobacterial Infections in Seadragons
Plasma Chemistry Database for Elasmobranchs
Reproduction of the Sand Tiger Shark in Captivity
Reproductive Cycle and Gestation of the Spotted Eagle Ray (*Aetobatus narinari*)
Reproductive Patterns of Cownose Rays (*Rhinoptera bonasus*)
Sea Turtle Reproductive Physiology
Seasonal Movement Patterns of Sand Tiger Sharks
Surgical Techniques in Cownose Rays and Southern Rays

**RIVERBANKS ZOO & GARDEN**

**Education**
Adult Programs
Animal Keeper’s Forum – Population Management Dedicated Issue Sponsorship
Backyard Buds
Camp – Summer Zoo Camp
Camp – Winter Camp
Camp – Sprout Camp
Event Days – Party for the Planet, World Oceans, Enrichment Days, and Endangered Species Day
Family Events
Garden Outreach
Garden Tours
Guest Engagement
Homeschool
Junior Master Gardeners
Little Learners at Riverbanks
Outreach
Overnights
School Programs – Classroom Style
School Programs – Tour Style
Zoo Teens
ZooBots

Field Conservation
African Penguin Chick Bolstering Project
American Association of Zoo Keepers for the International Rhinoceros Foundation
Building an Evidence Base for Gharial (Gavialis gangeticus) Conservation in Nepal
California Condor Restoration
Conservation of Threatened Cavity-Nesting Birds and Their Atlantic Forest Communities in Argentina
Construction of the Rabonga Hills Ranger Post, Murchison Falls National Park Recovery Program
Ecology and Conservation of King Cobras in the Western Ghats of India
Environmental Correlates of Survival and Extinction for the Critically Endangered Blue-Crowned Laughingthrush
Komodo Dragon SSP General Fund
Marc MacDonald – Staff Conservation Presentation
MOTUS Wildlife Tracking System
Population Assessment of a Newly Discovered Population of Nautilus off of the Coast of Thailand
Prevalence of Snake Fungal Disease in Watersnakes on the Savannah River Site
Protecting Southern Africa’s Most Endangered Carnivore Through Rabies Vaccination Campaigns
Riverbanks Field Conservation Associates Program
Silent Forest Campaign
South Carolina Wildlife Federation Scholarship Fund
The Kids for Compassionate Conservation Program in Gabon

Turtle Survival Alliance (TSA) – Turtle Survival Center
Understanding Endocrine Control of Egg Production for Improved Reproduction of Whooping Cranes
Using a Multipronged Approach to Make a Biological Corridor in Misiones, Argentina a Reality
Using Stable Isotope Analysis to Assess Diet and Competition in Two Rare Island Endemics: Implications for Habitat Restoration and Species Persistence
Why, When, and How Giant Anteaters Cross Roads? Understanding Impacts and Effects of Roads on Giant Anteater Populations
Wildlife Poisoning Forensic Training and Awareness for Rangers, Enforcers, and Communities in Africa

Green Practices
ENERGY
Generated Renewable Energy On-Site
FOOD
Sourced Local Food or Grew it On-Site
GREEN CERTIFICATIONS
Certified by the Green Restaurant Association
GREEN PRACTICES IMPLEMENTED
Building Energy Management
Commingled Recycling
Community-Based Sustainability Projects
Composting (On-Site or Off-Site)
Diverted or Recycled Construction Waste
Generated Solar or Wind Energy
Green Building Policy/Commitment
Green IT
Green Purchasing Policy/Green Procurement
Procured Local Food for On-Site Animals and/or Guest
Used Enterprise (IT) Solutions to Track and Measure Sustainability Performance
WASTE
Documented Amount Composted

Research
Documenting the Mammalian Biodiversity of Sumaco National Park
SOUTH CAROLINA AQUARIUM

Education
“Good Catch” Seafood Initiative Educational Publications/Materials
Adult Learning Series
Aquarium AquaTeen Program
Aquarium Rovers
Behind the Scenes Tours
Daily Interpretive Program
Discovery Cart Program
Discovery Lab
Distance Learning
Good Catch (Sustainable Fisheries) Special Events
Good Catch Sustainable Seafood Initiative Dinner Series
High School Intern Program
Homeschool Programs
Member Educational Programs
Ollie’s Trading Post Trades
Roving Interpretation
Scavenger Hunts
Sea Turtle Hospital Tours
Shadow Day
South Carolina Aquarium Curriculum
South Carolina Aquarium Species Sheets
Structured School Program
Teacher Workshops
Tributaries Member Magazine
Volunteer Training

Field Conservation
Answering Management Questions Surrounding the Atlantic Horseshoe Crab: Impacts of Biomedical Bleeding in South Carolina
Cape Island Turtle Project
Robust Redhorse Conservation Committee
Sea Turtle Stranding Pathology – Formalized Data Collection and Disease Surveillance
South Carolina Aquarium Sea Turtle Care Center
South Carolina Department of Natural Resources (SCDNR) Marine Resources Division – In-Water Sea Turtle Study

South Carolina Oyster Restoration and Enhancement Program
South Carolina Phytoplankton Monitoring Network
Turtle Survival Center Veterinary Care Program

Research
Assessing the Impact of Invasive Red Lionfish (*Pterois volitans*) on the Diversity and Abundance of Fishes Associated With Artificial Reef Marine Protected Areas (MPAs)
Field-Based Bottlenose Dolphin Habitat Usage and Distribution Surveys
Nesting Population Assessment of the Atlantic Horseshoe Crab (*Limulus polyphemus*) in Charleston Harbor

South Dakota

BRAMBLE PARK ZOO

Field Conservation
American Kestrel Partnership
Raptor Rehabilitation
Upper Big Sioux River Watershed Project

Green Practices
GREEN PRACTICES IMPLEMENTED
Procured Local Food for On-Site Animals and/or Guest

Research
Lead Testing of Rehab Birds of Prey
Seasonal Fluctuations in Adult Mosquito Populations in Eastern South Dakota

GREAT PLAINS ZOO & DELBRIDGE MUSEUM OF NATURAL HISTORY

Field Conservation
AZA Conservation Grants Fund (CGF)
AZA SAFE
AZA Tiger SSP – Tiger Conservation Campaign
Giraffe Conservation Foundation (GCF)
International Rhino Foundation (IRF)
Minnesota Zoo Rhino Project
National Park Partnerships Planning
Native Raptor Rehabilitation
Okapi Conservation Project
Raptor Rehabilitation Flight Cage
Snow Leopard Trust (SLT)
Turtle Survival Alliance
Wildlife Conservation Network (WCN) – Ewaso Lions

Green Practices

ENERGY
Documented Amount Spent
Documented Amount Used

GREEN PRACTICES IMPLEMENTED
Commingled Recycling

Tennessee

CHATTANOOGA ZOO AT WARNER PARK

Education
Zoo Club
Zooniversity

Field Conservation
Chattanooga Zoo Conservation Award
Pantanal Giant Armadillo Project
Snow Leopard Trust (SLT)
Wildlife Rehabilitation

Green Practices

ENERGY
Documented Amount Used

FOOD
Sourced Local Food or Grew it On-Site

FUEL
Documented Amount Used

GREEN PRACTICES IMPLEMENTED
Alternative Fuel Usage for On-Site Fleet
Building Energy Management
Commingled Recycling
Energy Submetering
Green Building Policy/Commitment
Green Purchasing Policy/Green Procurement
Procured Local Food for On-Site Animals and/or Guest
Wastewater Reduction
Water Submetering
Waterwise Landscaping

WATER
Documented Amount Spent
Documented Amount Used

Research

Asleep or Faking it? The Patient State Index as a Novel Anesthetic Monitoring Tool in Captive Chimpanzee (*Pan troglodytes*)
Clinicopathological Features of Toxoplasmosis in Four Red Pandas (*Ailurus fulgens*)
Pulmonary Silicosis in Two Adult Rock Hyraxes
Treatment of Suspected Exertional Myopathy Using Dantrolene in a Coyote (*Canis lantrans*)
Using Internet Technology to Connect Chimpanzees

ELEPHANT SANCTUARY IN TENNESSEE

Green Practices

ENERGY
Documented Amount Used

FOOD
Generated Renewable Energy On-Site

FUEL

Documented Amount Spent
Documented Amount Used

GREEN PRACTICES IMPLEMENTED
Graywater Reuse and/or Rainwater Harvesting
Stormwater Management Program
NASHVILLE ZOO, INC.

Education

Camp Programs – Animal Olympics
Camp Programs – Creature Features
Camp Programs – Grossology
Camp Programs – Project GLOBE
Camp Programs – The Great Zoo Detective
Camp Programs – We Built A Zoo
Camp Programs – Zooper Heroes
Camp Programs – Zootastic Beasts
Event Programs – Avian Awareness Day
Event Programs – Great Backyard Bird Count
Event Programs – Party for the Planet
Event Programs – World Rhino Day
Homeschool Programs – A Day in the Life
Homeschool Programs – Animal Wrappers
Homeschool Programs – Come To Your Senses
Homeschool Programs – Endangered Species
Homeschool Programs – Surviving The Wild
Interpretive Programs – Adult Guided House Tour
Interpretive Programs – Andean Bear
Interpretive Programs – Cassowaries Love To Garden
Interpretive Programs – Children’s Guided House Tour
Interpretive Programs – Gibbons
Interpretive Programs – Lemurs
Interpretive Programs – Rhinos
Interpretive Programs – Tapirs
Interpretive Programs – Zebra
Overnight Programs – 3 Cheers for Animals
Overnight Programs – Animal Habitats
Overnight Programs – Animal Helpers
Overnight Programs – Bugs
Overnight Programs – Cub Scout Pack Program
Overnight Programs – Fur, Feathers, and Ferns
Overnight Programs – Girl Scout Troop Program
Overnight Programs – Senses
School Programs – A Day in the Life
School Programs – Animal Wrappers

MEMPHIS ZOO

Education
Earth Day
Explorers Academy
Homeschool Days
International Polar Bear Day
Zoo Camp
Zoo Classes
Zoo Snooze

Field Conservation
African Elephant Population Monitoring in the Okavango Delta, Botswana
Boreal Toad Conservation Program
Conserving the World’s Largest Amphibian: Reintroduction and Translocation of the Chinese Giant Salamander Into the Wild
Creating a New Self-Sustaining Population of the Critically Endangered Dusky Gopher Frog to Restored Habitat
Development of Assisted Reproductive Technologies for Endangered North American Amphibians
Development of Sperm Collection, Extension, Cryopreservation, and AI for Endangered U.S. Snakes
Fit for the Wild? A Comparison of Captive Raised and Wild Caught Dusky Gopher Frogs to Assess their Fitness for Reintroduction
Giant Panda Conservation
Jaguar Conservation in Brazil
Monitoring Local Avian Productivity and Survivorship
Pangolin Consortium
Purseweb Spider Conservation: Occupancy Modeling for Urban Forest Fragments
Returning the Louisiana Pine Snake to Restored Habitat
Urban Snake Ecology
Validating Non-Invasive Dermal Swabbing Method to Study Stress Hormones in Wyoming Toads

PLANS, POLICIES, AND BUDGETS
Developed or Updated a Sustainability Plan (or Equivalent)

WASTE
Documented Amount Composted
School Programs – Croft Middle Partnership
School Programs – Endangered Species
School Programs – Rosebank Elementary Partnership
School Programs – Sensational Animals
School Programs – Surviving the Wild
School Programs – The Rainforest
Scout Programs – 3 Cheers for Animals
Scout Programs – Animal Habitats
Scout Programs – Animal Helpers
Scout Programs – Bugs
Scout Programs – Cub Scout Pack Program
Scout Programs – Digging In The Past
Scout Programs – Girl Scout Troop Program
Scout Programs – Reptile and Amphibian Study
Tots Programs – All In The Family
Volunteer Programs – Docents
Volunteer Programs – Volunteer Corps
Volunteer Programs – ZooTeens

Field Conservation
American Association of Zoo Keepers (AAZK) – Bowling for Rhinos
Andean Bear Conservation Alliance
Association for the Conservation of Amazonian Biodiversity – Dallas World Aquarium Zoo (ACOBA-DWAZOO)
AZA SAFE – Vaquita Project
AZA Tiger SSP – Tiger Conservation Campaign
Bat Conservation International (BCI)
Belize Zoo and Tropical Education Center
Bongo Surveillance Project
Borneo Nature Foundation – Clouded Leopard, Leopard, Flat-Headed, and Marbled Cat
Cheetah Conservation Fund (CCF)
Clouded Leopard Project
Duke Lemur Center – Projects in the Sambava-Andapa-Vohemar-Antalaha (SAVA) Region of Madagascar
Garissa Giraffe Project
Giant Anteater Pilot Program in the Brazilian Pantanal
Gorilla Rehabilitation and Conservation Education (GRACE) Center
Hornbill Conservation: Borneo
Instituto de Pesquisas Ecológicas (IPÊ)
International Rhino Foundation
Lewa Wildlife Conservancy
Niassa Carnivore Project
Proyecto Tití
Red Panda Network (RPN)
Save Vietnam’s Wildlife Centre
Sia Eagle Center
The Sustainable Management of the Critically Endangered Goliath Grouper (Epinephelus itajara) and Smalltooth Sawfish (Pristis pectinata) in Belize
Turtle Survival Alliance (TSA)
Wildlife Conservation Network (WCN) – Cheetah Conservation Project
Wildlife Conservation Network (WCN) – Spectacled Bear Conservation
Wildlife Conservation Network (WCN) -Okapi Conservation Project

Green Practices
GREEN PRACTICES IMPLEMENTED
Commingled Recycling
Composting (On-Site or Off-Site)
Diverted or Recycled Construction Waste
Procured Local Food for On-Site Animals and/or Guest

RIPLEY’S AQUARIUM OF THE SMOKIES
Field Conservation
Apex Predator Tagging Study

Green Practices
ENERGY
Documented Amount Spent
Documented Amount Used
Generated Renewable Energy On-Site

GREEN PRACTICES IMPLEMENTED
Building Energy Management
Composting (On-Site or Off-Site)
Diverted or Recycled Construction Waste
Generated Solar or Wind Energy
Smart Building Strategies
Waterwise Landscaping

PLANS, POLICIES, AND BUDGETS
Developed or Updated a Sustainability Plan (or Equivalent)
Developed or Updated a Sustainability Plan

WATER
Documented Amount Spent
Documented Amount Used

Research
Bamboo Shark Reproduction
Fungal Infections in Horseshoe Crabs (*Limulus polyphemus*)
Mycobacterial Infections in Seadragons
Pharmacokinetics of Cefovecinin Teleost, Elasmobranchs, and Invertebrates
Plasma Chemistry Database for Elasmobranchs
Reproduction Cycle and Gestation of the Spotted Eagle Ray
Reproduction of the Sand Tiger Shark in Captivity
Reproduction Patterns of Cownose Rays
Sea Turtle Reproductive Physiology
Seasonal Movement Patterns of Sand Tiger Sharks
Surgical Techniques in Cownose Rays and Southern Rays

TENNESSEE AQUARIUM
Field Conservation
Adopt-A-Stream
Alligator Snapping Turtle Monitoring
Constructing a Freshwater Conservation Institute and Field Station
Cumberland Darter Conservation Genetics
Endangered Fishes of the Upper Mobile Basin
Freshwater Information Network
Monitoring and Recovery of the Laurel Dace
Rearing Barrens Topminnows (*Fundulus julisia*) for Conservation Purposes
Restoring Southern Appalachian Brook Trout
Ridges to Rivers

River Teachers
Serve and Protect - Supporting Sustainable Seafood
South Chickamauga Creek Assessment
Southeastern Freshwater Biodiversity Conservation Plan
Tennessee and Cumberland River Darter Conservation
Tennessee Lake Sturgeon Reintroduction Program

Green Practices
GREEN PRACTICES IMPLEMENTED
Community Supported Agriculture (CSA) Program for Staff
Composting (On-Site or Off-Site)
Denitrification Systems On Ground
Green IT

Research
Headwater Stream Community Ecology
Morphology and Hybridization in River Sturgeons
Turtle Morphology and Conservation

ZOO KNOXVILLE
Education
Animal/Biofact Chats
Animals in Action Show
Bedtime With the Beasts
Camp Wild
Exhibit Chats
Field Science Programs
Homeschool Days
Night Safaris
School Ambassador Animal Encounters
School Classroom Programs
School Tours
Scout Workshops
Teacher In-Service/Workshops
ZooCamp
ZOOMobile Outreach Classroom Programs
ZOOMobile Outreach Community Programs
ZOOMobile Outreach Display Program
Field Conservation
Appalachian Bear Rescue
Bog Turtle In-Situ Project
Center for Ecosystem Survival (SaveNature.Org) – Rainforest Conservation Parking Meter
Dian Fossey Gorilla Fund International
Game Rangers International – Elephant Orphanage Project and Kafue Conservation Project
Gorilla Rehabilitation and Conservation Education Center (GRACE)
Homopus Research Foundation
International Crane Foundation – Friends of Muraviovka Park
Mabula Ground Hornbill Project (MGHP)
Malaysian Conservation Alliance for Tigers (MYCAT)
Monarch Watch
Painted Dog Research Trust
Pan African Sanctuary Alliance (PASA)
Project Necturus
Radiated Tortoise SAFE
Red Wolf Coalition
Southern African Foundation for the Conservation of Coastal Birds (SANCCOB)
Tennessee Butterfly Monitoring Network
The Gibbon Rehabilitation Project
Tiger Conservation Campaign
Toucan Rescue Ranch
Turtle Conservancy – Ploughshare
Turtle Survival Alliance (TSA) – Madagascar Fund
VulPro
Wildlife Trafficking Alliance (USWTA)
World Parrot Trust (WPT)

Green Practices
GREEN PRACTICES IMPLEMENTED
Commingled Recycling
Generated Solar or Wind Energy
Graywater Reuse and/or Rainwater Harvesting
Green IT
Wastewater Reduction

PLANS, POLICIES, AND BUDGETS
Dedicated a Line Item in the Budget for Green Practices

Texas

ABILENE ZOOLOGICAL GARDENS

Education
Behind the Scenes
Birthday Parties
Camp Programs
DreamNight
Homeschool Classes
Junior Keeper
Kid’s Night Out
Night Hike
Party for the Planet
Preschool Classes
School Group Classes
World Giraffe Day
Zoo to You

Field Conservation
African People and Wildlife Fund
Amphibian Ark
AZA Avian Scientific Advisory Group (ASAG)
AZA Conservation Grants Fund (CGF)
AZA Crocodilian Advisory Group (CAG)
AZA Tiger SSP – Tiger Conservation Campaign
Chaco Jaguar Project
Colobus Conservation, Ltd.
Friends of the Attwater’s Prairie Chicken National Wildlife Refuge
Friends of the Laguna Atascosa National Wildlife Refuge
Giraffe Conservation Foundation (GCF)
International Crane Foundation (ICF)
International Rhino Foundation (IRF)
IUCN/SSC Conservation Planning Specialist Group (CPSG)
King Cobra Telemetry Project
Green Practices

ENERGY
Documented Amount Spent
Documented Amount Used

FUEL
Documented Amount Spent
Documented Amount Used

WATER
Documented Amount Spent
Documented Amount Used

GREEN PRACTICES IMPLEMENTED
Commimgled Recycling

WASTE
Documented Amount Recycled
Documented Amount Sent to Landfill

WATER
Documented Amount Spent
Documented Amount Used

Caldwell Zoo

Field Conservation
Attwater’s Prairie Chicken Recovery Program
International Elephant Foundation (IEF) – Elephant Painting Sales
International Rhino Foundation (IRF) – Animal Painting Sales
Various Organizations – Animal Painting Sales
World Giraffe Day Event – Giraffe Conservation Foundation

Green Practices

ENERGY
Documented Amount Spent
Documented Amount Used

FUEL
Documented Amount Spent
Documented Amount Used

WATER
Documented Amount Spent
Documented Amount Used

Research
Comparison of Circulating Vitamin D in Captive North American and Free-Ranging South African Black Rhinoceros
Compilation and Review of Archival Elephant Postmortem Data
Determining Genetic Variability, Kinship, and Uniqueness in the North American Cheetah Population
Developing Genomic Tools for Elephant Conservation
Improvement of Diagnostic Methods of Round Cell Neoplasia in Psittacine Birds
TVMDL Avian Study – Hematology of Galliformes & Anseriformes
Validation of a Rhino Specific Ferritin Enzyme Immunoassay for the Black Rhino, White Rhino, and Indian Rhino and the Impact of Individual/Environmental Factors on Serum Ferritin Concentrations

Cameron Park Zoo

Field Conservation
Bornean Orangutan Release
Borneo Orangutan Survival Foundation (BOS) – Milk Drive
Cameron Park Zoo Amphibian Conservation Award
Status of Conservation of Crocodile Species in Cuba

Green Practices

ENERGY
Documented Amount Used
EXTERNAL SUPPORT
Received Support From External Sources for Green Projects

GREEN PRACTICES IMPLEMENTED
Building Energy Management
Commingled Recycling
Community-Based Sustainability Projects
Generated Solar or Wind Energy
Purchased Green Power or Renewable Energy Credits (RECs)
Stormwater Management Program
Wastewater Reduction
Waterwise Landscaping

WATER
Documented Amount Used

Research
AZA Orangutan SSP – Sanctioned Tooth Emergence Project
Comparing Arm Vs. Finger Blood Pressure in Orangutans
Great Ape Cardio Health Workshop
Investigating the Composition of Milk of Apes

DALLAS ZOO
Education
Animal Adventures Outreach
Backstage Safari
Cheetah Encounter
Dallas Zoo Teen Science Cafe
Dallas Zoo Wild Earth Action Team
Dallas Zoo Wild Earth Weekends
Discovery House
Exploring
Family Campout
Family Conservation Club
Family Pop-Up
Family Zoo Adventures
Frog Club
Homeschool Day
Junior Rancher Adventure
Keeper Talks
Life On The Ranch
Lights Out Overnight
Love Birds and Wild Things
Nature Exchange
Nature Play
On-Site School Programs
Preschool Safari
Science Day
Sensory Friendly Day
Sleeping With the Fishes Overnight
Stroller Buddies
Summer Science Institute
Teacher Workshops
Trivia and Trails
Twilight Safari Night Hike
Wild About Art
Wild Adventures Camps
Wild Earth Preschool
Wild Encounters Stage
Wild F.U.N. (Families United in Nature)
Wild Gatherings
Wilds Of Africa Adventure Safari
Wildlife Volunteer Programs
Zoo Corps

Field Conservation
African Vulture Conservation Programme (VulPro)
American Association of Zoo Keepers (AAZK) – Bowling for Rhinos
Amphibian Ark
AZA Ape TAG – Conservation Initiative
AZA SAFE – African Penguin
AZA SAFE – Founders Circle
AZA SAFE – Vultures
Brazos River Water Snake Population Monitoring
Cheetah Conservation Fund (CCF)
Dian Fossey Gorilla Fund International
Dusky Gopher Frog Recovery Plan
Green Practices

ENERGY
Documented Amount Spent
Documented Amount Used

FOOD
Sourced Local Food or Grew it On-Site

FUEL
Documented Amount Spent
Documented Amount Used

Green Certifications
Certified Under ISO 14001

Green Practices Implemented
Alternative Fuel Usage for On-Site Fleet
Alternative Transportation Benefits for Staff
Alternative Transportation Discounts for Guests
Commingled Recycling
Completed Greenhouse Gas Inventory
Composting (On-Site or Off-Site)
Energy Submetering
Graywater Reuse and/or Rainwater Harvesting
Stormwater Management Program
Used Environmental Management System
Wastewater Reduction
Water Submetering
Waterwise Landscaping

Plans, Policies, and Budgets
Dedicated a Line Item in the Budget for Green Practices
Developed or Updated a Sustainability Plan (or Equivalent)
Developed or Updated a Sustainability Plan

WASTE
Documented Amount Composted
Documented Amount Recycled
Documented Amount Sent to Landfill

WATER
Documented Amount Spent
Documented Amount Used

Research
AZA – Integration of Multi-Institutional Tumor Data in Exotic and Zoological Species for Characterization of Novel Cancer Models
AZA Great Apes SSPs – Great Ape Cardiac Project: Brain Natriuretic Peptide (BNP) in Great Apes
AZA Tiger SSP – The Prusten Project – Heard but Not Seen: Acoustic Monitoring of Wild Tiger Populations
Cats: Is Symmetric DiMethylArginine (SDMA) Testing a Valid Indicator of Kidney Function in Sumatran Tigers, Indochinese Tigers, or Cheetahs?

Chimps - Assessing Long-Term Stress in Great Apes: Allostatic Load in Chimpanzees and Bonobos

Comparative Morphological and Molecular Studies of Mammal Brains

Elephant Endotheliotropic Herpesvirus (EEHV) Consortium – EEHV Surveillance: Serum

Elephant Endotheliotropic Herpesvirus (EEHV) Consortium – EEHV Surveillance: Trunk Wash and Blood Samples


Elephant: Animal Wellness Assessment, Research, and Education (AWARE) Institute: Elephant Welfare Initiative

Elephant: Developing Genomic Tools for Elephant Conservation

Elephant: Paternity and Genetic Diversity of Imported African Elephant Founders

Great Ape Neuroscience Project

Meerkats: Genomic Investigation of Cardiomyopathy in Meerkats

Rat Snake: Population Dynamics of Urban Texas Rat Snakes (*Elaphe obsoleta lindheimeri*) at the Dallas Zoo

Reptile: Use of Fentanyl Transdermal Systems as Pain Management in a Black Mamba (*Dendroaspis polylepis*)

Reptiles: Coccidia (Apicomplexa) of Reptiles Utilizing Fecal Samples from Dallas Zoo Captives

**EL PASO ZOO**

**Education**

Animal Encounters

Animal Presentations

Behind the Scenes Tours

Bird Show

Birthday Party Animal Encounter

Classroom Programs

Meet the Keeper

Public Programs - Enrichment

Public Programs - Trainings

Scout Badge Program

Sleepovers

**Field Conservation**

American Association of Zoo Keepers (AAZK) - Rainforest Conservation Parking Meter

AZA Jaguar SSP

Black-Footed Ferret Monitoring

Bolson Tortoise Conservation Project

Burrowing Owl Conservation

Chihuahuan Desert Education Coalition Certified Habitat Program

El Paso County’s Ascarate Park Project

Franklin Mountains State Park Wildlife Monitoring

Indonesia Species Conservation Program (ISCP)

Keystone Heritage Park

Lion Guardians - Kenyan Maasailand

Mexican Wolf Conservation

Orangutan Foundation International

Peninsular Pronghorn Conservation

Raptor Rehabilitation

Rio Bosque Wetlands Park Conservation Program

Save the Vaquita

Saving Asian Wild Horses

Second Chance Wildlife Rescue

Stickhouse Wildlife Sanctuary

Turtle Survival Alliance

World Wildlife Fund (WWF) – Flying Squad Project

**Green Practices**

**ENERGY**

Generated Renewable Energy On-Site

**EXTERNAL SUPPORT**

Received Support From External Sources for Green Projects

**FUEL**

Documented Amount Spent

Documented Amount Used

**GREEN CERTIFICATIONS**

Certified by the Green Restaurant Association
GREEN PRACTICES IMPLEMENTED
Alternative Transportation Benefits for Staff
Commingled Recycling
Composting (On-Site or Off-Site)
Generated Solar or Wind Energy
Graywater Reuse and/or Rainwater Harvesting
Procured Local Food for On-Site Animals and/or Guest
Wastewater Reduction

Research
Endoscopic Sexing of Juvenile and Hatchling Bolson Tortoises
Inca Tern Kinship Study
Two-Toed Sloth Genetic Testing SSP Project

ELLEN TROUT ZOO
Field Conservation
AZA Conservation Grants Fund (CGF)
AZA Louisiana Pine Snake SSP – Conservation Initiative
Black Bear Task Force
Croc School Scholarship
CrocFest
Turtle Survival Alliance
Zoo Conservation Outreach Group (ZCOG)

FORT WORTH ZOO
Field Conservation
Arthur A. Seeligson Jr. Conservation Fund
Black-Capped Vireo Monitoring
Bonobo and Congo Biodiversity Initiative (BCBI)
Caribbean Wildlife Conservation
Chiricahua Leopard Frog Rescue and Reintroduction
Conservation of the Critically Endangered Anegada Iguana
Cryptobranchid Interest Group
Health Evaluation, Pathogen Screening, and Hematologic Values In Free Ranging Texas Horned Lizards (Phrynosoma cornutum)
High Andean Flamingo Project
Houston Toad Rescue and Reintroduction

International Elephant Foundation (IEF)
International Iguana Foundation (IIF) – Iguana Conservation
International Rhino Foundation (IRF) – Rhino Conservation
Jamaican Iguana Conservation and Reintroduction Project: Health Assessment
Jamaican Iguana Recovery Program
Louisiana Pine Snake SSP – Reintroduction
Monarch Watch
Mountain Bongo Project
Okapi Conservation Project
Panamanian Golden Frog Conservation and Education Outreach
Pecos Pupfish Rescue
Pollinator Habitat Restoration
Puerto Rican Crested Toad Reintroduction and Research
Puerto Rican Harlequin Butterfly Monitoring
Roatan Iguana Conservation Program
Spotted Lauraeus Lizard Assurance Population and Research
Texas Freshwater Mussel Propagation and Research
Texas Horned Lizard Reintroduction
Texas Kangaroo Rat Reintroduction and Research
Turtle Survival Alliance (TSA) – Turtle and Tortoise Conservation
Virgin Islands Tree Boa Reintroduction and Research

Green Practices
ENERGY
Documented Amount Spent
Documented Amount Used

FUEL
Documented Amount Spent
Documented Amount Used

GREEN PRACTICES IMPLEMENTED
Commingled Recycling
Composting (On-Site or Off-Site)
Diverted or Recycled Construction Waste
**WASTE**
Documented Amount Recycled
Documented Amount Sent to Landfill

**WATER**
Documented Amount of Wastewater Generated
Documented Amount Spent
Documented Amount Used

**Research**
A Living Collections Stewardship Initiative for Sustainability of Endangered Salamanders
Activity Budget for the Fort Worth Zoo Asian Elephants Before and After Introduction to a New Exhibit
Behavioral Monitoring of a Fort Worth Zoo Gorilla Troop
Behavioral Monitoring of a Male Mandrill at the Fort Worth Zoo
Linking In-Situ and Ex-Situ Populations of Threatened Amphibians: Using the Puerto Rican Crested Toad and Chiricahua Leopard Frog as a Model
Research Support – Research Committee Management and Service
Scales on Trails

**FOSSIL RIM WILDLIFE CENTER**

**Field Conservation**
Addax Antelope Assurance Population
Attwater’s Prairie Chicken Database
Attwater’s Prairie Chicken Recovery Program – Captive Breeding and Release
Dama Gazelle Conservation Assurance Population
Dama Gazelle Genetic Study
International Elephant Foundation (IEF) – Salary Administration
International Rhino Foundation (IRF)
Masked Bobwhite Quail Recovery Team Participation
Mexican Wolf Assurance Population
Red Wolf Assurance Population
Red Wolf Inflammatory Bowel Disease: Microbiome and Fecal Corticoid
Role of Diet in the Severity of Inflammatory Bowel Lesions in Red Wolves

Sahara Conservation Fund (SCF)
Scimitar-Horned Oryx Conservation Assurance Population
Source Population Alliance (SPA)
Southern Black Rhinoceros Conservation Assurance Population

**Green Practices**
**ENERGY**
Documented Amount Spent
Documented Amount Used

**EXTERNAL SUPPORT**
Received Support From External Sources for Green Projects

**FOOD**
Sourced Local Food or Grew it On-Site

**FUEL**
Documented Amount Spent
Documented Amount Used

**GREEN CERTIFICATIONS**
Certified as a Wildlife Habitat

**GREEN PRACTICES IMPLEMENTED**
Commingled Recycling
Community-Based Sustainability Projects
Composting (On-Site or Off-Site)
Diverted or Recycled Construction Waste
Graywater Reuse and/or Rainwater Harvesting
Green Building Policy/Commitment
Green IT
Procured Local Food for On-Site Animals and/or Guest
Stormwater Management Program
Waterwise Landscaping

**PLANS, POLICIES, AND BUDGETS**
Dedicated a Line Item in the Budget for Green Practices
Developed or Updated a Sustainability Plan (or Equivalent)
Developed or Updated a Sustainability Plan
WATER
Documented Amount Spent

Research
Attwater's Prairie Chicken Fenbendazole Toxicity Study
Biomarkers of Gastrointestinal Disease in Cheetahs
Comparison of Butorphanol-Azaperone-Medetomidine (BAM) and Thiafentanil in Addax Antelope
Determining Sexual Maturity in Male Addax (Addax nasomaculatus) via Electroejaculation

GLADYS PORTER ZOO
Education
Birthday Safari
Off-Site Presentations
On-Site Presentations
Outreach Program
Starlight Safari
Students Teaching Students
Summer Safari
Teacher Workshops
Tours

Field Conservation
CrocFest
Giraffe Conservation Foundation (GCF)
Health Screening of Ocelots
International Iguana Foundation (IIF)
Kemp's Ridley Sea Turtle Recovery Program: Mexico/United States
Pangolin Consortium
Sea Turtle, Inc.
Support for Conservation Planning Specialist Group

Green Practices
GREEN PRACTICES IMPLEMENTED
Building Energy Management
Composting (On-Site or Off-Site)
Diverted or Recycled Construction Waste
Generated Solar or Wind Energy
Graywater Reuse and/or Rainwater Harvesting
Green Building Policy/Commitment
Green IT
Green Purchasing Policy/Green Procurement
Wastewater Reduction
Waterwise Landscaping

HOUSTON AQUARIUM, INC.
Education
“Built for Survival” Animal Presentation Outreach
Animal Encounter
Animal Meet and Greet
Aquarium Adventure Exhibit Tours
Behind the Scenes Tour
Biologist Chat
Career Day
Classroom Programs
Community Outreach
Educator Open House
Endangered Species Day
Home School Day
Hospital Outreaches
Marine Biologist/Zoologist for a Day Programs
Party for the Planet
Private Interactive Diver Show
Sawfish Day
Scout Programs
Sea Safari Camp
Self-Guided Tours
Shark Weekend
Sloth Weekend
Stingray Reef
Tiger Chat
Tiger Weekend
Wild Dreams Overnight
Working on the Wild Side
World Oceans Day
World Rainforest Day
**Field Conservation**

American Association of Zoo Keepers (AAZK) – Bowling for Rhinos

Fins Attached

World Parrot Trust (WPT)

**HOUSTON ZOO, INC.**

**Education**

Adult Camp Zoofari

Adult Volunteer Story Tellers

Animal Encounters

Camp Zoofari - Summer Only

College-Aged Zoo Internship

Collegiate Conservation Program (CCP)

Educator Workshops

Educators Night Out

Educators Open House

Family Adventure Programs

Family Nature Club

Family Travel Program - Yellowstone National Park

Homeschool Programs

Interpretive Programs

School Break Camp Zoofari

School Partnerships

Wild Together – Zoo Tour for Early On-Set Alzheimers

Zoo Crew - Teen Program (October - May)

Zoo Crew - Teen Summer Only Program

Zoo Overnights

Zoo Sprouts! - 18 Months to 23 Months With Favorite Adult

Zoo Sprouts! - 2-3 Year Olds With Favorite Adult

Zoo Sprouts! - 4-5 Year Olds and Their Favorite Adult

ZooMobile

**Field Conservation**

Alaotran Gentle Lemur (Hapalemur alaotrensis), Increased and Concerted Monitoring and Research Efforts for it's Conservation: A Unique Wetland Primate on the Brink of Extinction

Attwater's Prairie Chicken Recovery Program

**AZA SAFE**

Baird’s Tapir Survival Initiative

Black Rhino – Namibia, Integrated Rural Development and Nature Conservation

Blue-Billed Curassow: Acoustic Monitoring and Camera Traps to Determine Landscape Connectivity

Bornean Elephant: Satellite Tracking and Social Behaviour in the Lower Kinabatangan Wildlife Sanctuary: Sabah, Malaysia

Chapman's Fringed Orchid

Conservation Centers for Species Survival (C2S2) – Cheetah

Conservation Heritage Turambe Rwanda

Conservation of the Painted Terrapin in Indonesia

Crab-Trap Clean Up

East Texas Black Bear Task Force

Eastern Ghats Wildlife Society

Ewaso Lions

Galápagos Education: Ecology Project International

Galápagos Tortoise Movement Ecology Project

Giant Anteaters and Highways Program, Brazil

Giant Armadillo: Conservation and Ecology in the Brazilian Pantanal

Gorilla Doctors

Gorilla Rehabilitation and Conservation Education (GRACE) Center

Goualougo Triangle Ape Project (GTAP)

Groupe d'Étude et de Recherche sur les Primates de Madagascar (GERP)

Herpetofauna Survey of the Tillari Bioregion, Northern Western Ghats, India

Hirola Antelope

Hornbill Conservation, Sabah, Malaysia

Houston Toad Headstart and Recovery Program

Human-Wildlife Conflict Collaboration

International Crane Foundation (ICF)

International Elephant Foundation (IEF)

International Rhino Foundation (IRF)

IUCN CPSG

Jane Goodall Institute

Kinabatangan Orangutan Conservation Project
Landscape Ecology and Behavioral Responses of the Sunda Pangolin (*Manis javanica*) to Habitat Fragmentation and Degradation in Sabah, Malaysia

Laos Elephant Conservation Center

Lion Guardians

Lion Landscapes

Lowland Tapirs as Landscape Detectives for the Atlantic Forest, Pantanal, and Cerrado

MarAlliance

*Microcebus gerpi* – Preliminary Assessment of the Distribution and Conservation Challenges of the Critically Endangered Mouse Lemur

Niassa Lion Project

Niassa Lion Project – Elephant-Beehive Fence

Ocelot – Friends of Laguna Atascosa National Wildlife Refuge

Okapi Conservation Project

Painted Dog Conservation (PDC)

Panama Amphibian Rescue and Conservation (PARC)

Pride Lion Conservation Alliance

Rattlesnake Preservation Trust

Ruaha Carnivore Project (RCP)

Rwanda Bat Conservation: Using Bat Ecosystem Services to Trigger Their Conservation

Saving Endangered Grey Crowned Cranes in Rwanda

Saving Vietnam’s Wildlife: Pangolin and Small Carnivore Rescue, Rehabilitation, and Release

Sea Turtle Rescue and Rehabilitation in the Gulf of Mexico

Sea Turtles: Argentina

Tiger Conservation in the Endau-Rompin Landscape of Peninsular Malaysia

Wildlife Conservation Program – Staff Salaries

**Green Practices**

**ENERGY**

Documented Amount Used

Generated Renewable Energy On-Site

**EXTERNAL SUPPORT**

Received Support From External Sources for Green Projects

**FOOD**

Sourced Local Food or Grew it On-Site

**FUEL**

Documented Amount Spent

Documented Amount Used

**GREEN CERTIFICATIONS**

Certified by the Green Restaurant Association

**GREEN PRACTICES IMPLEMENTED**

Alternative Transportation Benefits for Staff

Alternative Transportation Discounts for Guests

Commingled Recycling

Community-Based Sustainability Projects

Composting (On-Site or Off-Site)

Generated Solar or Wind Energy

Graywater Reuse and/or Rainwater Harvesting

Green Building Policy/Commitment

Procured Local Food for On-Site Animals and/or Guest

Waterwise Landscaping

**PLANS, POLICIES, AND BUDGETS**

Dedicated a Line Item in the Budget for Green Practices

Developed or Updated a Sustainability Plan (or Equivalent)

**WASTE**

Documented Amount Composted

Documented Amount Recycled

Documented Amount Sent to Landfill

**WATER**

Documented Amount Used

**Research**

Behavior and Fecal Hormone Monitoring During Zoo Lights

Collaborative Research Project Investigating Elephant Endotheliotropic Herpesvirus (EEHV)

Comparison of Gastrointestinal Transit Times Using 3 Different Indigestible Materials in the Houston Toad (*Bufo houstonensis*)

Evaluation of Cell Preservatives on the Integrity of Avian Whole Blood Samples Over Time
Evaluation of Cell Preservatives on the Integrity of Galapagos Tortoise Whole Blood Samples Over Time

Sound Level Data Collection During Seasonal Special Events and Sound Level Impact on Zoo Collection

RAINFOREST & AQUARIUM AT MOODY GARDENS, INC.

Field Conservation
American Bird Conservancy
Avian Scientific Advisory Group
AZA Chelonian TAG
AZA Chinese Alligator SSP
AZA Giant Otter SSP
AZA Humboldt Penguin SSP
AZA Komodo Dragon SSP
AZA Ocelot SSP
AZA Panamanian Golden Frog SSP
AZA Rodriguez Bat SSP
Belize Botanic Garden
Environmental Advocacy
Galveston Chapter of American Association of Zoo Keepers
Galveston Island Nature Tourism Council – Local Nature Tourism Support
Giant Otter Conservation
Marine Mammal Stranding Rehab Support
Microplastics Study – Turtle Island Restoration Network
One World One Ocean
Sea Turtle Conservation - Galveston
SExual COral REproduction (SECORE)
Southern African Foundation for Conservation of Coastal Birds (SANCCOB)
Turtle Survival Alliance (TSA)

Green Practices

ENERGY
Documented Amount Spent
Documented Amount Used

FOOD
Sourced Local Food or Grew it On-Site

FUEL
Documented Amount Spent
Documented Amount Used

GREEN PRACTICES IMPLEMENTED
Building Energy Management
Commingled Recycling
Composting (On-Site or Off-Site)
Diverted or Recycled Construction Waste
Graywater Reuse and/or Rainwater Harvesting
Wastewater Reduction

PLANS, POLICIES, AND BUDGETS
Dedicated a Line Item in the Budget for Green Practices
Developed or Updated a Sustainability Plan (or Equivalent)
Developed or Updated a Sustainability Plan

WASTE
Documented Amount Composted
Documented Amount Recycled
Documented Amount Sent to Landfill

WATER
Documented Amount Spent

SAN ANTONIO ZOOLOGICAL SOCIETY

Education
Community – Based Programs
Community Volunteers
Docent Station Encounters
Guest Encounters Butterflies
Guest Encounters Lory Landing
Guests Encounters Giraffes
Intern/Service Volunteer Training and Hours Served
Interpretation and Fieldwork (Teen)
Outreaches
Playleader Encounters
Real.Wild.Classrooms.
School Group Visits
Sleepovers
Staff Interpretation
Summer Camp
Volunteer Training (Adult)
Volunteer Training (Teen)
Zoo School

**Field Conservation**
AZA FrogWatch USA
AZA Komodo Dragon SSP
AZA Puerto Rican Crested Toad SSP – Captive Reproduction and Reintroduction of the Puerto Rican Crested Toad (*Peltophryne lemur*) Tadpoles
Bolson Tortoise Recovery Project
Cave Fauna Biodiversity
Cheetah Conservation Fund
Chilean Amphibian Conservation Center
Chinese Cave Fish Working Group
Conservation of the Georgia Blind Salamander and the Dougherty Plain Cave Crayfish
Conservation of the Reticulated Flatwoods Salamander (*Ambystoma bishopi*)
Deep-Pelagic Nekton Dynamics (DEEPEND)
Ducks Unlimited, Inc.
Habitat Restoration Around Bracken Bat Cave
International Rhino Foundation (IRF)
Japanese Giant Salamander Conservation
Kemp’s Ridley Sea Turtle Project
Lone Star Rattlesnake Days
Mexican Blindcat Program
Monarch Butterfly Marking Project
Monarch Fest
Monarch Larval Monitoring Survey
Monarch Watch – Monarch Waystation Program
North American Freshwater Turtle Research Group (NAFTRG)
Population Ecology of the Grotto Salamander (*Eurycea spelaea*)
Primeval Flat-Footed Salamander Study
Project Selva (Peruvian Cooperative)
Rough Footed Mud Turtle Project
San Antonio Zoo Center for Conservation and Research
Texas Horned Lizard Reintroduction Project
The Ocean Project
Universidad Autónoma de Nuevo León – Alligator Lizard Study
Universidad Autónoma de Nuevo León – Captive Rattlesnake Husbandry
Zoo Conservation Outreach Group (ZCOG)

**Green Practices**

**ENERGY**
Documented Amount Spent
Generated Renewable Energy On-Site

**FOOD**
Sourced Local Food or Grew it On-Site

**FUEL**
Documented Amount Spent
Documented Amount Used

**GREEN PRACTICES IMPLEMENTED**
Alternative Fuel Usage for On-Site Fleet
Alternative Transportation Benefits for Staff
Commingled Recycling
Composting (On-Site or Off-Site)
Diverted or Recycled Construction Waste
Energy Submetering
Generated Solar or Wind Energy
Graywater Reuse and/or Rainwater Harvesting
Green Building Policy/Commitment
Green Purchasing Policy/Green Procurement
Procured Local Food for On-Site Animals and/or Guest
Wastewater Reduction
Waterwise Landscaping

**PLANS, POLICIES, AND BUDGETS**
Dedicated a Line Item in the Budget for Green Practices
GREEN CERTIFICATIONS
One or More Buildings LEED-Certified by the US Green Building Council

GREEN PRACTICES IMPLEMENTED
Building Energy Management
Commingled Recycling
Denitrification Systems On Ground
Green IT

PLANS, POLICIES, AND BUDGETS
Developed or Updated a Sustainability Plan (or Equivalent)
Developed or Updated a Sustainability Plan

WASTE
Documented Amount Recycled
Documented Amount Sent to Landfill

WATER
Documented Amount Spent
Documented Amount Used

Research
Sea Life Sea Turtle Blood Study

SEA WORLD SAN ANTONIO
Field Conservation
Amazon River Dolphin Population Survey in the Lower Rio Negro
Big River Education and Leadership Initiatives
Engaging Urban Youth and Young Adults in Coastal Restoration Through Oyster Shell Recycling
Enhancing the Educational Capacity of the World’s Largest Bat Cave
Foraging Ecology and Habitat Use of Cook Inlet Beluga Whales (Delphinapterus leucas)
Galveston Bay Foundation’s Marine Debris Events and Abandoned Crab Trap Removal
Horniman Museum and Gardens
Increasing the Galapagos Penguin Population
Living Lands and Waters – Aquatic Debris Removal From America’s Rivers

SEA LIFE GRAPEVINE AQUARIUM
Education
Amazing Cephalopods
Behind the Scenes Tour
Birthday Parties
Claws Talk
Clownfish Talk
Clownfish/Jellyfish Talk
Marine Careers
Meet the Creatures – Storytime
Ocean Talk
Octopus Talk
Quiz Trail
Rainforest Talk
Ranger Mission Packs
Sea Turtle Talk
Seahorse Talk
Senses of the Sea
Shark School
Squid Dissection
Stingray Talk
Turtle Time
Young Environmentalist Program

Field Conservation
City of Grapevine
Lake Grapevine Beach Cleanup

Green Practices
ENERGY
Documented Amount Spent
Documented Amount Used
Pollinator Protectors
Restore America’s Estuaries
Rewilding Project
SeaWorld San Antonio – Animal Rescue and Rehabilitation Program
Shark Habitat Use and Vulnerability in the Greater Caribbean
Texas Marine Mammal Stranding Network
Vancouver Aquarium Marine Science Centre – Mom, Can You Hear Me? Impacts of Underwater Noise on Mother-Calf Communication in Endangered Beluga Whales

TEXAS STATE AQUARIUM

Education
4D Theater
Animal Presentations/Encounters
Animal Science Exploration Program
Aquarium Biofact Carts
Aquarium Discovery Programs
Aquateen Mentoring Program
Aquavision Distance Learning
Camp-Ins
Conservation Theme Days
Dream Nights
Exclusive Encounters
Exhibit Interpretation/Interactions
Homeschool
Outreach
Party for the Planet
Play to Learn
School Year Mini Camps
SeaCamp
Seafood Wars
Sensory Sensitive Sunday
Teacher Professional Development
Teen STEM Cafe
Volunteer Continuing Education Trainings
Wildlife Theater Shows
World Oceans Day

Field Conservation
Adopt-a-Beach
Aquarium Conservation Partnership (ACP)
WCCR – Monitoring the Heart of Texas Coastal Sportfisheries: Using Advanced Technologies to Understand Environmental Drivers of Fish Abundance and Productivity in Channel Passes
Wildlife Care, Conservation, and Research Fund – Documentation, Protection, and Tracking of Nesting Adult Green Sea Turtles in Texas to Aid With Management Efforts
Wildlife Care, Conservation, and Research Fund – Fibropapillomatosis in Kemp’s Ridley Sea Turtles (Lepidochelys kempii)
Wildlife Care, Conservation, and Research Fund – Spatial Movements of Tagged Sharks in the Isla Mujeres Fishing Areas, Quintana Roo, Mexico

Green Practices
ENERGY
Documented Amount Spent
Documented Amount Used
EXTERNAL SUPPORT
Received Support From External Sources for Green Projects
FUEL
Documented Amount Spent
GREEN CERTIFICATIONS
Certified by the Green Restaurant Association
GREEN PRACTICES IMPLEMENTED
Alternative Fuel Usage for On-Site Fleet
Commingled Recycling
Community-Based Sustainability Projects
Green IT
Procured Local Food for On-Site Animals and/or Guest
Wastewater Reduction
Waterwise Landscaping

Research
Cetacean Welfare Study

World Oceans Day
THE DALLAS WORLD AQUARIUM

Education
Dallas World Aquarium Website
Earth Day Celebration
Exhibit Ambassadors
Exhibit Touchscreens
Field Guide
General Education Program
International Sawfish Day
Keeper Talks
Migratory Bird Day
Online and Offsite Lectures
Vaquita Awareness Day
World Oceans Day Celebration

Field Conservation
Amazon Rescue Center
Caribbean Manatee Conservation
Costa Rican Sloth Conservation
Harpy Eagle Conservation
Horned Guan Conservation
Iguana Specialist Group, IUCN/SSC
IUCN/SSC Conservation Planning Specialist Group (CPSG)
Mexican Crocodilian Conservation
Orinoco Crocodile Conservation Project
Resplendent Quetzal Conservation
Turtle Survival Alliance (TSA)

Research
Advancing Conservation of the Amazonian Manatee, Trichechus inunguis, in Iquitos, Peru
Breeding Behavior, Propagation, and Management of the Ribbon Pipefish (Haliclithys taeniophorus)
Captive Husbandry and Breeding Behavior of the Leafy Seadragon (Phycodurus eques)
Development of an Intensive Aquaculture Program Within a Public Aquarium
Preserving the Orinoco Crocodile (Crocodylus intermedius) at the Dallas World Aquarium
Spawning Behavior and Early Development of the Flashlight Fish (Photoblepharon palpebratum)

Utah

TRACY AVIARY
Education
Book and Boots

Field Conservation
Alta Baseline Bird Monitoring
Alta Nest Box Monitoring Study
Assessing the Bird Community at Mill Creek Confluence Before and After Restoration
Baseline Bird Inventory in Liberty Park
Baseline Inventory – Regional Athletic Conference and Jordan River Golfcourse
Bird Monitoring at Herman Franks Park
Bird Monitoring at Salt Lake City’s Water Reclamation Facility
Bird Monitoring Before and After Daylighting and Restoration of the Three Creeks Confluence
Bird Monitoring in Galena Soo’nkhanni
Bird Monitoring in the Big Bend Restoration Area
Bringing Lucy’s Warblers Home: Discovering Nesting Needs and Preferences to Increase Nesting Opportunities
City Creek Citizen Science Project
Dark Skies Program
Great Green Macaw Conservation and Education
Great Salt Lake Partnership for Education and Longitudinal Investigation of American White Pelicans (PELI) Project
Guam Kingfisher Conservation
Monitoring Migratory Snowy Plovers (Charadrius nivosus) and Overwintering Shorebirds in Mexico
Movement of American White Pelicans in Northern Utah: Management Implications on Nesting and Foraging Grounds
Participation of Tracy Aviary Staff in Field Conservation Projects
Population Connectivity of Snowy Plovers (Charadrius nivosus nivosus) on the Southern Great Plains of Texas, New Mexico, and Oklahoma
Project Broadtail
Staff Field Conservation Grant: Alta Bird Monitoring Site Vegetation Surveys
Staff Field Conservation Grant: Nest Box Surveying and Banding of American Kestrels
Trumpeter Swan Society Oregon Restoration Project
Vegetation Structure and Insect Prey Availability in Sage-Grouse Brood-Rearing Habitat
Wildlife Rehabilitation Center of Northern Utah (WRCNU)

Green Practices

ENERGY
Documented Amount Used
Generated Renewable Energy On-Site
Purchased Renewable Energy

FUEL
Documented Amount Used

GREEN CERTIFICATIONS
Certified as a Wildlife Habitat

GREEN PRACTICES IMPLEMENTED
Alternative Transportation Benefits for Staff
Building Energy Management
Commingled Recycling
Composting (On-Site or Off-Site)
Diverted or Recycled Construction Waste
Generated Solar or Wind Energy
Graywater Reuse and/or Rainwater Harvesting
Green Building Policy/Commitment
Green Purchasing Policy/Green Procurement
Purchased Green Power or Renewable Energy Credits (RECs)
Smart Building Strategies
Stormwater Management Program
Wastewater Reduction
Water Submetering
Waterwise Landscaping

PLANS, POLICIES, AND BUDGETS
Developed or Updated a Sustainability Plan (or Equivalent)

WATER
Documented Amount Used

UTAH’S HOGLE ZOO

Field Conservation
Action for Cheetahs in Kenya
Advanced Detection and Deterrence of Polar Bears (*Ursus maritimus*)
American Association of Zoo Keepers (AAZK) – Bowling for Rhinos
AZA FrogWatch USA
Black-Footed Ferret Utah Reintroduction Program
Boreal Toad Conservation Program
Conservation Staff Labor
Giraffe Conservation Foundation (GCF)
Gorilla Rehabilitation and Conservation Education (GRACE) Center
Gorongosa Recovery Project
Grevy’s Zebra Trust
HawkWatch International
International Elephant Foundation (IEF)
International Rhino Foundation (IRF)
Jordan River Restoration Project
Kinabatangan Orangutan Conservation Project
Lewa Wildlife Conservancy
Marine Mammal Center
Niassa Carnivore Project
Polar Bears International (PBI)
Radiated Tortoise Conservation Program
Red Panda Network
Sage Grouse Fenceline Collisions
Snow Leopard Trust (SLT)
Turtle Survival Alliance (TSA) – Radiated Tortoise Conservation Program
Wild Aware Utah
Wildlife SOS
Wyoming Toad Recovery Program

Green Practices

ENERGY
Documented Amount Spent
Documented Amount Used
Generated Renewable Energy On-Site
Purchased Renewable Energy

EXTERNAL SUPPORT
Received Support From External Sources for Green Projects

FOOD
Sourced Local Food or Grew it On-Site

FUEL
Documented Amount Spent
Documented Amount Used

GREEN CERTIFICATIONS
Certified by the Green Restaurant Association
One or More Buildings LEED-Certified by the US Green Building Council

GREEN PRACTICES IMPLEMENTED
Alternative Fuel Usage for On-Site Fleet
Alternative Transportation Benefits for Staff
Carbon Offsets for Employee Travel
Commingled Recycling
Composting (On-Site or Off-Site)
Diverted or Recycled Construction Waste
Energy Submetering
Green IT
Purchased Green Power or Renewable Energy Credits (RECs)
Stormwater Management Program
Waterwise Landscaping

PLANS, POLICIES, AND BUDGETS
Dedicated a Line Item in the Budget for Green Practices
Developed or Updated a Sustainability Plan (or Equivalent)

WASTE
Documented Amount Recycled
Documented Amount Sent to Landfill

WATER
Documented Amount Spent
Documented Amount Used

Research
The Orang-utan Conservation Genetics Project

Virginia

MILL MOUNTAIN ZOO
Green Practices

GREEN PRACTICES IMPLEMENTED
Composting (On-Site or Off-Site)
Graywater Reuse and/or Rainwater Harvesting
Procured Local Food for On-Site Animals and/or Guest

VIRGINIA AQUARIUM & MARINE SCIENCE CENTER
Education
Access Aquarium
Behind-the-Scenes Experiences
Birthday Parties for Children
Communicating Ocean Science to Informal Audiences (COSIA)
Docent – Continuing Education
Docent – Continuing Education Online Classes
Docent Introductory Training
Dolphin Watching Boat Trip
Ecotours
Gallery Programs
Halloween at the Aquarium
Here Be Dragons Member Events
Marsh Ambassadors
Mentoring Young Scientists
Mermaid Mondays
Ocean Collections Boat Trip
Overnights for Members and Family Audiences
Reflecting on Practice Informal Education Class
School Programs – On-Site
School Programs – Outreach
Scouts – Overnights
Sensible Seafood Fest
Sensible Seafood Presentations
Special Needs Under the Sea
Specialty Boat Trips
STEAM
Stranding Response Presentations
Stranding Response Team Outreach Visits
Stranding Response Team Trainings for Staff and Volunteers
Summer Camps
Teacher Trainings
Valentine’s Dinner
Watts Conservation Lecture Series
Waves, Words, and Wonder
Whale Watching Boat Trips
Youth Conservation Series

Field Conservation
Aquarium Conservation Partnership (ACP)
AZA Conservation Grants Fund (CGF)
AZA FrogWatch USA
AZA Komodo Dragon SSP
AZA SAFE
Development of Mid-Atlantic Humpback Whale Catalog (MAHWC)
Gladys Porter Zoo – Support for Crocodile Conservation
Helping Hooked Turtles – Support for Hooked Sea Turtle Rehabilitation
IUCN/SSC Crocodile Specialist Group – Tomistoma Task Force
Kemp’s Ridley Sea Turtle Population Recovery Project
Occurrence of Baleen Whales Along the Continental Shelf Region of the VACAPES OAREA off Southern Virginia – Data Synthesis from Previous Projects
Pilot Study: Tagging Hauled-Out Juvenile Seals in Virginia
SAFE Sea Turtle Program
Sea Turtle Nest Monitoring in Virginia Beach, Virginia
Sea Turtle Tagging and Tracking in Chesapeake Bay and Coastal Ocean Waters of Virginia
Sea Turtles and Fishing Piers – Mitigating Hook and Line Interactions
SEXual COral REproduction (SECORE)
Support for Post-Mortem Examination of Stranded Large Whales in Virginia

The Center for Conservation Biology – Osprey Banding and Tracking Project
The Hawk Conservancy Trust
The Ocean Project
Tracking Loggerhead Sea Turtle Yearlings
Turtle Survival Alliance (TSA)
Virginia Aquarium Research and Conservation Division Support
Virginia Coastal Zone Management Program Grant – Virginia Sea Turtle and Marine Mammal Stranding Network

Green Practices
ENERGY
Documented Amount Spent
Documented Amount Used
EXTERNAL SUPPORT
Received Support From External Sources for Green Projects
FOOD
Sourced Local Food or Grew it On-Site
FUEL
Documented Amount Spent
Documented Amount Used
GREEN CERTIFICATIONS
Certified as a Wildlife Habitat
GREEN PRACTICES IMPLEMENTED
Alternative Transportation Benefits for Staff
Building Energy Management
Commingled Recycling
Community-Based Sustainability Projects
Composting (On-Site or Off-Site)
Energy Submetering
Graywater Reuse and/or Rainwater Harvesting
Green Building Policy/Commitment
Green IT
Green Purchasing Policy/Green Procurement
Procured Local Food for On-Site Animals and/or Guest
Smart Building Strategies
Stormwater Management Program
Wastewater Reduction
Water Submetering
Waterwise Landscaping

PLANS, POLICIES, AND BUDGETS
Developed or Updated a Sustainability Plan (or Equivalent)
Developed or Updated a Sustainability Plan

WASTE
Documented Amount Composted

WATER
Documented Amount of Wastewater Generated
Documented Amount Spent
Documented Amount Used

Research
Blubber Hormones: A Marker of Dolphin Health and Well-Being
Citizen Science Water Quality Monitoring Project
Monitoring Marine Debris in Virginia’s Coastal Zone

VIRGINIA LIVING MUSEUM
Field Conservation
AZA FrogWatch USA
AZA Lined Seahorse SSP
AZA Red Wolf SSP
Bird Feeder Watch
Butterfly Count: North American Butterfly Association (NABA) – Annual Field Survey
Clean the Bay Day
Coastal Cleanup – Clean Virginia Waterways
James River Water Quality Testing
Journey North Tulip Test Garden Project
Monarch Butterfly Tagging Survey
Monofilament Recycling and Fishing Gear Recovery
Oyster Restoration
Project Clean Stream
Sea Grass Restoration (Seed Collection)

Sea Turtle Head Start Program
Turtle Census
Virginia Amphibian Monitoring Project (VAMP)

Green Practices

ENERGY
Documented Amount Used
Generated Renewable Energy On-Site

GREEN CERTIFICATIONS
Certified as a Wildlife Habitat

GREEN PRACTICES IMPLEMENTED
Alternative Fuel Usage for On-Site Fleet
Commingled Recycling
Community Solar Program
Composting (On-Site or Off-Site)
Generated Solar or Wind Energy
Graywater Reuse and/or Rainwater Harvesting
Procured Local Food for On-Site Animals and/or Guest
Waterwise Landscaping

PLANS, POLICIES, AND BUDGETS
Developed or Updated a Sustainability Plan (or Equivalent)
Developed or Updated a Sustainability Plan

WASTE
Documented Amount Composted

WATER
Documented Amount of Wastewater Generated
Documented Amount Spent
Documented Amount Used

Research
An Ecological and Genetic Data Baseline for the Endangered Fijian Free-Tailed Bat (2018-2019)
Biological Survey of Tropical Dry Forests (TDF) in Vanua Levu
Butterfly Count
Invasive Turtle Species Census
GREEN PRACTICES IMPLEMENTED

Alternative Transportation Benefits for Staff
Building Energy Management
Community-Based Sustainability Projects
Diverted or Recycled Construction Waste
Energy Submetering
Green Building Policy/Commitment
Green IT
Stormwater Management Program
Wastewater Reduction
Water Submetering
Waterwise Landscaping

PLANS, POLICIES, AND BUDGETS

Dedicated a Line Item in the Budget for Green Practices

WASTE

Documented Amount Recycled
Documented Amount Sent to Landfill

WATER

Documented Amount of Wastewater Generated
Documented Amount Spent
Documented Amount Used

Washington

NORTHWEST TREK WILDLIFE PARK

Education
Adventure Treks
Amphibian Workshops
Cheney Center
Conservation Awareness Program Carts
Core Area Contacts
Elk Bugling Tour
Keeper Adventure Tours
Photo Tours
Scout Days
Skype in the Classroom
Special Events
Tram Tours
Virtual Field Trips

Field Conservation
Bat Monitoring & White-Nose Syndrome Surveillance
Fisher Rehabilitation & Release Project
Grit City Carnivore Project
Mountain Goat Relocation
Pierce County Habitat Monitoring
Training and Use of Scat-Sniffing Dogs for Field Population Studies

Green Practices
ENERGY
Documented Amount Used

EXTERNAL SUPPORT
Received Support From External Sources for Green Projects

FOOD
Sourced Local Food or Grew it On-Site

FUEL
Documented Amount Used

GREEN PRACTICES IMPLEMENTED
Alternative Fuel Usage for On-Site Fleet
Commingled Recycling
Composting (On-Site or Off-Site)
Green IT
Stormwater Management Program
Waterwise Landscaping

WASTE
Documented Amount Recycled
Documented Amount Sent to Landfill

WATER
Documented Amount Used

POINT DEFIANCE ZOO & AQUARIUM

Education
Camp Adventures
Career Day
Career Discovery Programs
Community Science (Formerly Known as Citizen Science)
Home School and Special Program Requests
Internship
Junior Guides
Keeper Talks and Close Encounters
Programs for Young Children
Senior Guides
Snooze Overnights
Special Events
Summer Camp Assistants
Visitor Interpretive Programs
Wild Wonders Outdoor Theater
Wildlife Champions
Wildlife Scholars
Zoo Guides
Zoo to School
Zoo to You – Community Fee-Based

Field Conservation
A Restoration Initiative for the At-Risk Oregon Spotted Frog (*Rana pretiosa*)
Assessing Walrus Benthic Prey Base in Bristol Bay, Alaska
Bringing the Message Home: Billboards to Complete Anoa Outreach in Sulawesi, Indonesia
Connectivity and Spatial Ecology of Blacktip Sharks (*Carcharhinus limbatis*) in the Gulf of California
Critical Habitat, Stock Structure, Movement Ecology, and Population Connectivity of Scalloped Hammerhead Sharks (*Sphyrna lewini*) in the Central Pacific Ocean
Developing Conservation Response Units in Sumatra
Fisher Recovery in Washington State
Foraging Ecology of Northern Sea Otters in Washington State
Hawai’i Wildlife Fund Hawksbill Recovery Project

Home Range Stability and Territorial Dynamics of the Sunda Clouded Leopard (*Neofelis diardi*) in a Fragmented and Landscape-Converted Habitat

Khao Kheow Zoo – Clouded Leopard Breeding

Project Seahorse

Red Wolf Zoo-Based Breeding and Recovery

Rockfish Surveys Documenting Shifting Ecosystems

Shark Tagging in the Revillagigedo Islands


The Bornean Carnivore Programme: Improving Understanding of Population Connectivity and Ecological Needs of Sunda Clouded Leopards and Sympatric Threatened Carnivores in Sabah

The Effects of Anthropogenic Activities on Carnivores in Malaysian Borneo

Tiger Conservation in the Greater Leuser Landscape and the Greater Bukit Baresan Selatan Landscape of Sumatra

Endocrine and Behavioral Parameters of Reproduction in Pacific Walrus

Red Wolf Sperm Cryopreservation, Capacitation, and Culture

Rockfish Surveys Documenting Shifting Ecosystems

Sea Ice Ecology Project – Using GPS Ear Tags to Track Male and Subadult Polar Bears in Western Hudson Bay

Whisker Growth Dynamics in Pacific Walruses (*Odobenus rosmarus divergens*) Under Human Care

SEATTLE AQUARIUM

Education

Beach Naturalist

Cedar River Salmon Journey

Citizen Science

Connections Program

Deaf Community Day

DreamNight

Early Childhood Outreach

Lightning Talks

Salmon Homecoming

Seattle Aquarium Open House

Self-Guided Tours

Summer Camps

Teacher Workshops

Toddler Time

Field Conservation

Beach Naturalist Program

Cedar River Naturalist Program

Evaluating Empathy for Wildlife

Exploring Audience Perceptions of Terminology

Fostering Empathy for Animals: A Review of the Literature

Hawaii Reef Fish Diversity and Abundance

Northern Sea Otter Activity Budgets of Foraging Data

Olympic Sculpture Park Intertidal Monitoring

Rehabilitated Sea Turtle Satellite Tracking

Salish Sea Rockfish Diversity and Abundance Surveys

Sea Otter Population Genetics

Sixgill Shark (*Hexanchus griseus*) Diver Sighting Database

Green Practices

GREEN PRACTICES IMPLEMENTED

Commingled Recycling

Community-Based Sustainability Projects

Completed Greenhouse Gas Inventory

Composting (On-Site or Off-Site)

Energy Submetering

Green Purchasing Policy/Green Procurement

Procured Local Food for On-Site Animals and/or Guest

Purchased Green Power or Renewable Energy Credits (RECs)

Water Submetering

Waterwise Landscaping

Research

CT Anatomy and Histopathology of Gas Bubble Disease in Rockfish

Determination of Baseline Hematologic, Serum Biochemical, and Heavy Metal Values in Captive Japanese Spider Crabs (*Macrocheira kaempferi*)

Development of Non-Surgical Artificial Insemination for the Genetic Management of Tigers

Efficacy and Reversal of Suprelorin® (Deslorelin) in the Clouded Leopard (*Neofelis nebulosa*)
Green Practices

ENERGY
Documented Amount Spent
Documented Amount Used
Generated Renewable Energy On-Site

EXTERNAL SUPPORT
Received Support From External Sources for Green Projects

FOOD
Sourced Local Food or Grew it On-Site

FUEL
Documented Amount Spent
Documented Amount Used

GREEN PRACTICES IMPLEMENTED
Alternative Transportation Benefits for Staff
Building Energy Management
Commingled Recycling
Community Solar Program
Community-Based Sustainability Projects
Completed Greenhouse Gas Inventory
Composting (On-Site or Off-Site)
Diverted or Recycled Construction Waste
Generated Solar or Wind Energy
Green Building Policy/Commitment
Green IT
Procured Local Food for On-Site Animals and/or Guest
Purchased Carbon Offset(s) for On-Site Utility Use
Smart Building Strategies
Used Enterprise (IT) Solutions to Track and Measure Sustainability Performance

GREENHOUSE GAS EMISSIONS
Documented Amount of Greenhouse Gas Emissions

WASTE
Documented Amount Composted
Documented Amount Recycled
Documented Amount Sent to Landfill

WATER
Documented Amount of Wastewater Generated
Documented Amount Spent
Documented Amount Used

Research
Alcid Feather Endocrinology
Cow Shark Conservation Genetics
Grey and Blue Whale Fecal Hormones
Hawaii Reef Survey Data Analysis
Mentoring of Graduate Students
Microplastic Monitoring
Noninvasive Techniques to Monitor Reproductive Hormones of Captive Pacific Harbor Seals (*Phoca vitulina richardi*)
Northern River Otter Toxicology
Ocean Acidification Monitoring and Equipment Testing
Rockfish Survey Data Analysis
Sea Otter Conservation Endocrinology
Sea Otter Toxicology
Sixgill Abundance
Support of Outside Research Projects

WOODLAND PARK ZOO

Education
Ambassador Animal Outreach
Animal Stage Programs
Docent Program – Toolboxes and Rambles
Docent Programs – Animal Encounters
Docent Programs – Conservation Connections
Interpretive Engagements
Public Programs – Wildlights
Seattle Youth Climate Action Network
Senior Programs
Zoo Corps
Zoomazium – Visitation/Interactive Play
Zoomazium Programs
Field Conservation

Amphibian Monitoring
Asian Elephant Support (AES)
AZA Conservation Grants Fund (CGF)
Blue-Crowned Laughingthrush Annual Population Census
Center for Conservation of the Humboldt Penguins in Punta San Juan, Peru
Cheetah Conservation Fund (CCF)
Citizen Science Habitat Restoration
Evergreen Carbon Capture Program
Field Conservation Grant Management
Green Seattle
Hornbill Research Foundation (HRF) – Nest Adoptions in Thailand
HUTAN-Kinabatangan Orang-Utan Conservation Project – Elephant Conservation
International Rhino Foundation
International Veterinary Care, Inc.
Lewa Wildlife Conservancy
Licton Springs Conservation and Restoration Project
Mbeli Bai Study (MBS)
Mountain Goat Capture and Translocation
Muraviovka Park for Sustainable Land Use
Orangutan Habitat Protection and Patrolling in Gunung Palung National Park
Panthera – Malayan Tiger Project
Partula Snail Recovery and Reintroduction Project
Partulid Global Species Management Programme
Progressive Animal Welfare Society
Proyecto Taguá
Raptor Ecology of the Shrub-Steppe
River Otters of Western Washington: Sentinels of Ecological Health
Ruaha Carnivore Project (RCP)
Salmon Egg Confiscation
Saving the Asian Oryx
Seattle Urban Carnivore Project
Silverspot Butterfly Conservation Project
Snow Leopard Trust (SLT)
Tarangire Ecosystem Project – Tarangire National Park

Tree Kangaroo Conservation Program
Washington Department of Fish and Wildlife – Duck Research
Washington Urban-Wildland Carnivore Project
Western Pond Turtle Recovery Project
Western Wildlife Outreach
Wild Wise: Coexisting With Carnivores
Woodland Park Zoo Conservation Advocacy and Action Campaigns
Woodland Park Zoo’s Northwest Carnivore Project

Green Practices

ENERGY
Documented Amount Spent
Documented Amount Used
Generated Renewable Energy On-Site

EXTERNAL SUPPORT
Received Support From External Sources for Green Projects

FOOD
Sourced Local Food or Grew it On-Site

FUEL
Documented Amount Spent
Documented Amount Used

GREEN CERTIFICATIONS
Certified as a Wildlife Habitat
One or More Buildings LEED-Certified by the US Green Building Council

GREEN PRACTICES IMPLEMENTED
Alternative Fuel Usage for On-Site Fleet
Alternative Transportation Benefits for Staff
Alternative Transportation Discounts for Guests
Building Energy Management
Carbon Offsets for Employee Travel
Commingled Recycling
Community Solar Program
Community Supported Agriculture (CSA) Program for Staff
Community-Based Sustainability Projects
Research
Captive Orangutan Dentition Emergence Compilation Project
Correlations of Behavior Between Matschie’s Tree Kangaroo in Papua New Guinea and Captive Tree Kangaroos in Woodland Park Zoo
Determination of Important Causes of Morbidity and Mortality in Captive Psittacine Birds Submitted to the Ontario Veterinary College Teaching Hospital With Development of Specific Diagnostic Tests
Development of a Genome Resource Bank and Transcervical Insemination for Genetic Management of Tigers
Developmental Milestones and Mother/Young Interactions in Captive Matschie’s Tree Kangaroo at Woodland Park Zoo
Evaluating Welfare Effects of Giraffe Translocation
Genomic Investigation of Cardiomyopathy in Meerkats
Great Ape Neuroscience Project
Ovarian Function in Captive Female Orangutans
Retrospective Review of Giraffe Neoplasia Medical Records
Sex Chromosome Evolution in Lizards With a Focus on the Chinese Crocodile Lizard (Shinisaurus crocodilurus)
Snow Leopard SSP Health Survey
Species and Sex Genetic Testing of Two-Toed Sloths (Choloepus spp.) in the SSP Programs
Tree Kangaroo Reproductive Tissue Study
Visitor Perceptions of Animal Welfare and Empathy for Zoo Animals
Western Pond Turtle and Ulcerative Shell Disease: Uncovering the Role of the Microbiome in Species Restoration

GREENHOUSE GAS EMISSIONS
Documented Amount of Greenhouse Gas Emissions

PLANS, POLICIES, AND BUDGETS
Developed or Updated a Sustainability Plan (or Equivalent)

WASTE
Documented Amount Composted
Documented Amount Recycled
Documented Amount Sent to Landfill

WATER
Documented Amount of Wastewater Generated
Documented Amount Spent
Documented Amount Used
Washington D.C.

SMITHSONIAN NATIONAL ZOOLOGICAL PARK

Education
Cub Club: Fur, Feathers, & Scales
Cub Club: Growing Up Wild
Junior Zookeepers: If I Ran the Zoo
Junior Zookeepers: ZSI
Nature Exchange
President's Week Camp
Spring Camp
Stories & Stuffies
Stormwater Pollution Prevention
Thanksgiving Camp
Winter Camp
ZooSnooze

Field Conservation
Anesthesia Study Evaluating the Use of Etorphine and Azaperone Combination in Free-Ranging Warthogs (Phacochoerus africanus)
Assessing and Restoring Giant Panda Habitat in the Qinling Mountains
Assessing Spotted Turtle Distribution and Abundance in Virginia and the Eastern U.S.
Assessing the Conservation Status of Araucaria Forest in Brazil
Assessing the Genetic Structure of the Wood Turtle in the Northeast
Assessing Wood Turtle Distribution and Abundance in Virginia and the Northeast
Assessment of the Lowland Tapir (Tapirus terrestris) Population and Habitat Use Within the Paraguayan Chaco
BiodiversiTREE
Biomedical Survey and Ecology of the Endangered Mountain Tapir
Borneo Mammals
Breeding Ecology and Population Status of the Island Scrub-Jay

Capybaras, Ticks, and Brazilian Spotted Fever: How Land Use Change Affects Disease Dynamics and Transmission Risks
Climate Change Impacts on Giant Pandas
Comparison Between Subcarapacial Sinus and Brachial Vein Phlebotomy Sites for Blood Collection in Free-Ranging Gopher Tortoises (Polycephalus gopherus)
Conservation of Dama Gazelle
Conservation of Dholes in Thailand
Conservation of Ostrich in Niger, Africa for Reintroduction
Conservation of Persian Onager
Conservation of Scimitar-Horned Oryx
Conservation Partnership for the Painted Bunting
Conserving Coral Reefs
Density Dependence During the Non-Breeding Season and the Regulation of Migratory BirdPopulations
Determining the Distribution, Conservation Status, and Habitat Use of the Yucatan Box Turtle in Mexico
Disease Survey in Free-Ranging Warthogs (Phacochoerus africanus)
Domestic Animals in China Reserves
Ecological and Genomic Evaluation of the Ex-Situ Conservation and Reintroduction of the Orinoco Crocodile (Crocodylus intermedius) in Venezuela
Effects of Climate and Biotic Factors on Abundance, Demography, and Behavior of Forest Birds
Elephant Collaring and Satellite Tracking in Myanmar

eMammal
Experience the Migration of Brown Pelicans of the Disappearing Islands of the Chesapeake Bay
ForestGEO Ecosystems & Climate Initiative
Full Life Cycle Vulnerability Assessments for the Birds of the Upper Midwest Great Lakes Region
Gabon Biodiversity Program
Genetic Foundations for the Conservation of the Margarita Capuchin (Cebus/Sapajus apella margaritae)
Giraffe Conservation Status and Ecology in Northern Kenya
Global Volume and Impact of Illegal Wildlife Trade
Habitat Selection of Ocelot in Disturbed Pantanal Habitat
Improving Elephant Endotheliotropic Herpesviruses (EEHV) Diagnostic and Research Capacity in Southeast Asia With a Series of Training Workshops
Influence of Human Development on Movement and Ecology of Top Predators in Brazil
Jaguar Workshop in Paraguay
Mammal Distributions Across Protected Areas in the Region
Managing Human-Elephant Conflict in Myanmar (Burma)
Migratory Connectivity of the Birds of North America
Modeling Nomadic and Migratory Movements of Endangered
   Mongolian Gazelles Using Satellite Tracking and Satellite
   Estimates of Grassland Biomass
Monitoring Freshwater Fish Diversity in Morona, Peru
Monitoring Large Mammals in the Lower Madre de Dios
   Corridor
Monitoring Snaring in the Gamba Area
Montana Grassland Ecology
Multitrophic Consequences of Novel Plant Assemblages in
   Urban Ecosystem
North American Songbird Initiative
North American Songbird Working Group (NASWG)
Panama Amphibian Rescue and Conservation (PARC)
Paraguay In-Situ and Ex-Situ Conservation of the Atlantic
   Forest
Pilot Frog Release Study in Panama
Population Ecology of Green Turtles (Chelonia mydas) in the
   Caribbean
Real-Time Anti-Poaching and Survival Monitoring for
   Reintroduced Scimitar-Horned Oryx in Chad
Recovery of the Endangered Black-Footed Ferret
Reintroduction of Przewalski’s Horse in Xinjiang, China
Reintroduction of the Scimitar-Horned Oryx
Relationship Between Genetics, Stress, and Amyloid A (AA)
   Amyloidosis Prevalence in Cheetahs
Salamanders Response to Soil Freezing
Saola and Large Antlered Muntjac (LAM) Breeding/Rescue
   Center
Save the Golden Lion Tamarin
Smithsonian Institution Global Earth Observatory (SI-GEO)
   Large Forest Plot
Smithsonian Myanmar Initiative
Source-Sink Dynamics and Population Ecology of Wood
   Thrush
Supporting Integrated Protected Area Land and Seascape
   Management in Tanintharyi, Myanmar
Sustaining Reintroduced Przewalski’s Horses in Hustai Nuru
   National Park
The Changing Landscapes Initiative
The Red Siskin Initiative (Spinus cucullatus): Mitigating
   Unsustainable Harvest of Red Siskins in the Wild
The Red Siskin Initiative (Spinus cucullatus): Field Ecology
   for Species Conservation
The Red Siskin Initiative (Spinus cucullatus): Halting and
   Reversing Habitat Degradation
The Red Siskin Initiative (Spinus cucullatus): Strategic
   Planning for Species Conservation
Theoretical and Empirical Foundations for the Use of
   Distribution and Functionality Indicators at Various Scales
   in the Assessment of the Risk of Ecosystem Collapse
Understanding the Biology and Ecology of Dholes in
   Thailand
Understanding the Factors Leading to Reticulated Giraffe
   Decline
Understanding the Local and Landscape Predictors of Bird
   Diversity and Abundance in Agricultural Landscapes
Understanding Threats to Andean Flamingos in an Age of
   Rapid Change
Using Geographic Information Systems and Remote Sensing
   for Training Wildlife
ZooFari Direct Grant to Associação Mico Leão Dourado to
   Conserve Golden Lion Tamarin Habitat

Green Practices

ENERGY
Documented Amount Spent
Documented Amount Used
Generated Renewable Energy On-Site
Purchased Renewable Energy

FOOD
Sourced Local Food or Grew it On-Site

GREEN CERTIFICATIONS
One or More Buildings LEED-Certified by the US Green
   Building Council

GREEN PRACTICES IMPLEMENTED
Building Energy Management
Commingled Recycling
Composting (On-Site or Off-Site)
Diverted or Recycled Construction Waste
Generated Solar or Wind Energy
Graywater Reuse and/or Rainwater Harvesting
Green IT
Smart Building Strategies
Stormwater Management Program
Wastewater Reduction
Water Submetering
Waterwise Landscaping

GREENHOUSE GAS EMISSIONS
Documented Amount of Greenhouse Gas Emissions

PLANS, POLICIES, AND BUDGETS
Developed or Updated a Sustainability Plan (or Equivalent)

WASTE
Documented Amount Recycled
Documented Amount Sent to Landfill

WATER
Documented Amount Used

Research

A Behavioral Study of Kori Bustards at the Smithsonian National Zoological Park

A Review of Captive Breeding Options Being Considered by Parks Canada for Woodland Caribou (Rangifer tarandus caribou)

Activity Budget, Weight Management, and Light Cycles of Captive Ruby-Throated Hummingbirds

An Analysis of Behavioral Response by Cuban Crocodiles (Crocodylus rhombifer) to Hatchling Calls of Several Species

An Interdisciplinary Approach (Endocrine and Behavioral) to Assess the Impact of Cub Separation and Adult Breeding Behavior in Andean Bears

Anesthesia Induction and Maintenance in Adult Arapaima (Arapaima gigas)

Asian Water Dragon Parthenogenesis

Assessing New Options for Choice and Control With Asia Trail’s Sloth Bears Using Picture Recognition to Communicate Preferences and Enhance Bear Management

Assessing the Function of Penile Spines in Felid Species

Assessing the Relative Impacts of Anthropogenic Causes of Direct Bird Mortality

Assessment and Monitoring of Marine Benthic Macrofauna in the Area of Influence of the Peru Liquefied Natural Gas (LNG) Marine Terminal

Assessment and Monitoring of Marine Fish Communities and Plankton in the Area of Influence of the Peru Liquefied Natural Gas (LNG) Marine Terminal

Assessment and Monitoring of Seabirds in the Area of Influence of the Peru Liquefied Natural Gas (LNG) Marine Terminal

Assessment of Stereotypical Pacing and Welfare in an Adult Male Sloth Bear

Behavioral Differences Between Songbirds Housed as Pairs Versus Those Housed in Mixed Species Exhibits

Behavioral Patterns During Giant Panda Estrus

Biomaterial Collection and Archiving in Support of Other Research Projects

Biomedical Survey in Giant Pandas

Black Rhinoceros Health and Nutrition

Blood Drained of Life: Convergent Evolution of Coagulopathic Animal and Bacterial Toxins

Captive Orangutan Dentition Emergence

Carbon Content in Agroforestry Soils

Characterizing the Microbial Content of Gorilla Milk

Clinical Challenge: Diagnosis of Coenurosis (Taenia brauni) and Cecolith in a Malagasy Giant Jumping Rat (Hypogeomys antimena)

Comparison of Guaifenesin, Ketamine, and Medetomidine Constant Rate Infusion With Isoflurane Gas for Anesthesia Maintenance in American Black Bears (Ursus americanus)

Comparison of Sampling Methods for Detection of EEHV

Comparison of Trunk Secretions and Oral Swabs for Detection of Elephant Endotheliotropic Herpesvirus (EEHV) in African Elephants

Confidence Judgments and Metacognition in Comparative and Developmental Perspective

Connectivity for Conservation: Understanding the Complex Patterns of Altitudinal and Intratropical Migration

Conservation of Przewalski’s Horse

Creating Coral Nurseries in the Pacific

Cutaneous Lesions in Giraffe

Dermatitis and Rhinosinusitis Caused by Curvularia Species in a Chinese Goral (Naemorhedus griseus)
Determined Genetic Relatedness and Genomic Factors Associated With Health, Welfare, and Reproduction in Asian and African Elephants Ex-Situ

Determining Genetic Variability, Kinship, and Uniqueness in the North American Cheetah Population

Developing Group Management Strategies and Systems for Sustainable Populations of All Species

Developing Sperm Capacitation Procedure for Wild Canids

Diagnosis and Treatment of Batrachochytrium dendrobatidis in Green Salamanders (Aneides aeneus) and Long-Tailed Salamanders (Eurycea longicauda)

Disseminated Ophidiomyces Ophiodicola Infection in an Eastern Diamondback Rattlesnake (Crotalus adamanteus) Without the Presence of Skin Lesions

DNA Testing of Mob of Meerkats to Determine Relatedness and Parentage

Dominance Rank, Nutrition, and Sociality in Wild Female Eastern Chimpanzees (Pan troglodytes schweinfurthii)

Effects of a Recurring Late Night Event on the Behavior and Welfare of a Population of Zoo-Housed Gorillas

Emerging Diseases of Salamanders

Endocardiosis in Tetras

Endocrine Response Associated With Pair Bond Formation in Stanley Cranes

Endocrinology of Reproduction and Stress in the Giant Panda

Epidemiological Investigation of Ophidiomyces ophiodiicola Infection in Current and Historic Collections of Snakes at the National Zoological Park

Evaluating the Addition of Automatic Feeders on Asian Elephant (Elephas maximus) Behavior and Welfare

Evaluating Weight During Pregnancy

Evaluation of a Serum Neutralisation Test for Detection of Rift Valley Fever Antibodies in Suid Sera

Examination of Ovarian Stimulation Protocol and Semen Deposition Location to Increase Artificial Insemination Success in Felids

Extending the Fertility of Aging Female Cheetahs to Improve Population Genetic Health

Fission-Fusion Flock Dynamics and Space Use in Blue Jays

Forest Elephant Monitoring in Gamba, Gabon


Genetic and Health Evaluation of Asian Chelonians

Genomic Basis of Infertility in the Endangered Black-Footed Ferret

Genomics of Endangered Ungulates

Giant Panda Behavior Watch

Giant Panda Cub Development

Giant Panda Estrus Watch and Pregnancy/Birth Watch

Health Assessments of Zoo Asian and African Elephants in the US

Histologic Findings in Captive American Horseshoe Crabs

Identification of a Novel Highly Diverged Variant of EEHV1A in Lethal Cases of Hemorrhagic Disease from Borneo

Identifying Causes of Neonatal Mortality in African Painted Dogs

Identifying Causes of Poor Reproduction in Whooping Crane Maintained Ex-Situ

Identifying Migratory Connectivity of a Neotropical Migratory Bird Using New Technologies: Archival GPS Tags

Identifying Migratory Connectivity of Brown Pelicans Along the United States Atlantic Coast Using Satellite Tags

Immunoglobulins in Primate Milks

Impacts of Dam Removal on Dippers and River Otters

Influence of Environmental Factors on Red Panda Welfare

Influence of Gonadotropin Stimulation on Anti-Müllerian Hormone (AMH) Concentrations in Female Cheetahs

Influence of Herd Size and Animal Transfers in Shedding Frequency of Elephant Endotheliotropic Herpesvirus in Asian Elephants (Elephas maximus)

Integration of Multi-Institutional Tumor Data in Exotic and Zoological Species for Characterization of Novel Cancer Models

Introduction of Solitary Male Lion-Tailed Macaque

Investigating Memory Processes in Great Apes: A Cross-Species Comparison

Investigating Serum and Synovial Fluid Inflammatory Markers in Healthy and Arthritic Asian and African Elephants

Investigating the Attribution of Perception in Orangutans and Gorillas

Investigating the Effect of Population Density and Provisioning on Stress Physiology in the Black-Crowned Night Heron Across Two Urban Zoos

Investigation of Soft Tissue Mineralization in Prehensile-Tailed Porcupines (Coendou prehensilis)

Investigation of Stress Hormones in Apteryx mantelli: Comparison of Ambassador Brown Kiwi With Those On and Off Display
Life-Cycle Population Modeling for Select Species
Linking Behavioral Traits to Crop Raiding Behavior In Semi-Captive Myanmar Timber Elephants (*Elephas maximus*)
Local Adaptation in Channel Island Song Sparrows
Longitudinal Changes in Milk Composition in Apes
Longitudinal Evaluation of Milk Composition in Lowland Gorilla
Long-Term Low Level Elephant Endotheliotropic Herpes Virus-1A Viremia in a Captive Asian Elephant Calf (*Elephas maximus*)
Mad Island Migration
Mammals in Shade Coffee Systems
Measurement of Lactate Levels Three Ways During Anesthesia of American Black Bears (*Ursus americanus*)
Migration in Green Darner Dragonflies
Migratory Connectivity and At-Sea Distribution of Bahamian Seabirds
Migratory Connectivity in the Ocean
Molecular Diagnostics Testing Capacity in Myanmar
Molecular Diagnostics Testing Capacity in Zambia
Monitoring of the Health Effects of Sugar Removal From the Diets of Selected Small Mammals
Natural Choice in Apes
Neighborhood Nestwatch
Nest Location Preferences in Zoo-Housed Orangutans
Nesting Behavior, Licker Plugging, and the Provision of Water Sounds in Zoo-Housed Orangutans
Oxytocin as a Measure of Social Bond and Welfare in Western Lowland Gorilla (*Gorilla gorilla gorilla*) in North America Zoos
Pilot Study Using Hydroacoustic Monitoring to Detect Fish Communication – “Eavesdropping on Amazonian Fish”
Rabi Forest Monitoring Plot
Ranking Trees as Insect Producers for Wood Warblers
Regurgitation and Reingestion in a California Sea Lion: Assessment and Intervention
Relationship Between Skin Microbiomes and Disease Outcomes
Retrospective Review of Anesthetic Protocols in Spectacled Bears, Sloth Bears, and Giant Pandas at the National Zoological Park
Rhythm of Life
Sagari, Peru Pipeline Canopy Bridge Project
Sample Collection for Herpesvirus Prevalence in Elephants
Sea Lion Swim Study
Social Behavior and Innovation in a Mixed-Species Lemur Exhibit
Spatial Proximity and Use of Gestures in Zoo-Housed Great Apes
Temperature Monitoring in Brown Kiwi
Terrestrial Connectivity of the Gamba Landscape
The Effect of Music on the Welfare of a Green Winged Macaw
The Effects of Carry-Over and Habitat on Gray Catbirds Across an Urbanization Gradient
The Effects of Transfer and Breeding Introductions on the Fishing Cat (*Prionailurus viverrinus*) – ACTH Challenge Addendum
The Energetic Cost of Motherhood in Bornean Orangutans
The Migratory Connectivity Project
The Orangutan Conservation Genetics Project
The Red Siskin Initiative (*Spinus cucullatus*): Evolutionary Perspectives for Pan-Situ Conservation
The Red Siskin Initiative (*Spinus cucullatus*): Ex-Situ Research in Support of In-Situ Fieldwork and Reintroduction
Tool Use Comprehension in Allen’s Swamp Monkeys and Schmidt’s Red-Tailed Monkeys
Tracking the Migrations of the Endangered Kirtland’s Warbler
Treatment and Management of Chronic Recurrent Herpes Simplex 1 Infection in a White Faced Saki Monkey (*Pithecia pithecia*)
Understanding Basic Reproductive Biology and Welfare of Captive Asian Elephants in Burma for Management and Conservation
Understanding Basic Reproductive Biology and Welfare of Captive Asian Elephants in Thailand for Management and Conservation
Understanding Endocrine Control of Egg Production for Improved Reproductive Health of Cranes
Understanding How Hormones Modulate Behavioral Phenotype and Social Network Structure
Understanding Migratory Restlessness in a Captive Population of Songbirds
Understanding Stereotypic Behavior in a Female Asian Short-Clawed Otter
Understanding the Cause and Effect of Feather Plucking in a Blue Billed Curassow
Understanding the Hormonal Onset of Puberty in Male and Female Cheetahs (*Acinonyx jubatus*)
Understanding the Role of Endocrine Signals During Migratory Urge in Captive Songbirds
Understanding the Underlying Causes of Inflammatory Bowel Disease in Large Canids
Using Captive Gray Seal Fecal Samples to Assess and Analyze Prey Consumption in Wild Male and Female Gray Seals
Using Serum Inflammatory Markers to Investigate the Immune Response to Elephant Endotheliotropic Herpesvirus (EEHV)
Validating Fecal Hormone Assays to Assess Reproductive Status in Sloth Bears
Variation in Musth Among Asian Elephants (*Elephas maximus*): Applications
Viral Particle Isolation From Animal Tissues
Welfare Assessment of Stanley Cranes at the Smithsonian’s National Zoological Park Through Fecal Glucocorticoid Analysis With a Special Emphasis on Program Animal, “Alice”
What Makes Ross’s Gulls Pink?
Xanthoma Formation in Black Pacu (*Colossoma macropomum*)

West Virginia

**OGLEBAY’S GOOD ZOO**

**Education**

Fox Run Hospital Programs
Master Naturalist
Preschool Programs
Summer Camps
Zoo-To-You

**Field Conservation**

Captive-Rearing of Eastern Hellbenders Destined for Reintroduction
eDNA and Physical Surveys for Eastern Hellbender
Monarch Watch

Raptor Rehabilitation
Snow Leopard Trust Donation
Snow Leopard Trust Encounter Donation
Surveillance for White-Nose Syndrome in West Virginia

**Wisconsin**

**HENRY VILAS ZOO**

**Education**

Biofact Carts and Interactive Kits Program (Discovery Docents)
Bleacher Program (Live Animal Onsite Presentations)
Conservation Education Awareness Days (Throughout the Year)
Meet & Greet (Interaction With Animal Handler and Education Animal)
Preschool Pride (Expanded From Previous Zoo School Summer Program)
Sleepover
Spring Break Vacation Camp
Winter Vacation Camp
Zoo Camp (Summer Camp)
Zoo-To-You Program (Live Animal Outreach Into the Community)

**Field Conservation**

AZA African Penguin SSP – Sea Research Foundation
AZA Orangutan SSP – Field Conservation Program
AZA Orangutan SSP – Field Conservation Support
AZA Tiger SSP – Tiger Conservation Campaign
Deputy Director Sea Turtle Nest Monitoring in Florida
Giraffe Conservation Foundation (GCF)
Monarch Watch
Polar Bears International (PBI)
Red Panda Network (RPN)
Ruaha Carnivore Project (RCP)
Southern African Foundation for the Conservation of Coastal Birds (SANCCOB)
**Green Practices**

**ENERGY**
- Documented Amount Spent
- Documented Amount Used
- Generated Renewable Energy On-Site

**FUEL**
- Documented Amount Used

**GREEN PRACTICES IMPLEMENTED**
- Alternative Transportation Benefits for Staff
- Alternative Transportation Discounts for Guests
- Commingled Recycling
- Community Supported Agriculture (CSA) Program for Staff
- Composting (On-Site or Off-Site)
- Diverted or Recycled Construction Waste
- Energy Submetering
- Generated Solar or Wind Energy
- Graywater Reuse and/or Rainwater Harvesting
- Green Building Policy/Commitment
- Procured Local Food for On-Site Animals and/or Guest
- Stormwater Management Program
- Wastewater Reduction
- Water Submetering
- Waterwise Landscaping

**PLANS, POLICIES, AND BUDGETS**
- Developed or Updated a Sustainability Plan (or Equivalent)
- Developed or Updated a Sustainability Plan

**Research**
- Genetic Assessment of Sex and Species in Two-Toed Sloths in AZA Zoos
- Sloths as Sentinels of Ecosystem Health: Evaluation of Free-Ranging Sloth Serum for Commonly Applied Agricultural Pesticides in Costa Rica

**INTERNATIONAL CRANE FOUNDATION**

**Education**
- Adopt-a-Crane Program
- Annual Midwest Crane Count
- Crane Conservation Education Activity Packets
- Estuaries in the Balance: The Texas Coastal Bend
- Whooping Crane Education Trunk
- Whooping Crane Timeline

**Field Conservation**
- Black-Necked Crane China Project
- Eastern Migratory Whooping Crane Reintroduction
- Red-Crowned Crane: China Flyway Project
- Red-Crowned Crane: Russia Amur Lowlands Project (Muraviovka Project)
- Sarus Crane: Cambodia Project
- Sarus Crane: Myanmar Project
- Sarus Crane: Vietnam Project
- Siberian Crane: China Staging – Stopover Area Project
- Siberian Crane: Wintering Area Project – Poyang Lake Project
- South Korea Crane Project
- White-Naped Crane: Western Flyway Project in Mongolia
- Whooping Crane Central Flyway Project: Aransas Wood Buffalo Population Breeding and Migratory Stopover Areas
- Whooping Crane: Texas Wintering Area Project

**Green Practices**

**ENERGY**
- Generated Renewable Energy On-Site

**GREEN PRACTICES IMPLEMENTED**
- Alternative Fuel Usage for On-Site Fleet
- Commingled Recycling
- Community Supported Agriculture (CSA) Program for Staff
- Composting (On-Site or Off-Site)
- Diverted or Recycled Construction Waste
- Generated Solar or Wind Energy
- Graywater Reuse and/or Rainwater Harvesting
- Green Building Policy/Commitment
Green IT
Stormwater Management Program

WATER
Documented Amount Used

Research
Are There Emerging Health Concerns for Eastern Migratory Whooping Cranes?
Assessment of the Impact to Cranes From a Newly Constructed Transmission Line
Attitudes, Knowledge, and Beliefs About Whooping Cranes
Biomonitoring of Whooping Cranes in the Central Flyway
Blue Cranes in South Africa: Safe or a Ticking Time Bomb
Bridging the Gap for South African Wattled Crane: Population Health and Biology as it Relates to Captivity and Release
Climate Change Vulnerability Assessment for Three Important Wetlands in the Mekong River Delta
Collaborative Telemetry Egg Incubation Parameter Study
Comparison of Sandhill and Whooping Crane Breeding Success in Wisconsin
Conservation of Black-Necked Cranes on the Western Plateau in China
Crane Semen Cryopreservation Study
Detection and Management of Mild Hyperparathyroidism in Juvenile Whooping Cranes (Grus americana)
Evaluation of Nocturnal Roost Sites Used by Whooping Cranes on the Texas Coast, United States
Fecal Corticosterone and Potential Chronic Stress in Captive Whooping Cranes
Field Support for Research Related to the Central Flyway Population of Whooping Cranes
Glitchen River Watershed Project
Improving Nutrition and Outcomes of Displaced Rwandan Grey Crowned Cranes
Increasing Crane Sperm Cryosurvival by Altering Liquid Composition of the Plasma Membrane
Local and Landscape Scale Habitat Characteristics of Areas Used by Whooping Cranes During Winter to Understand What Drives Habitat Selection at Multiple Spatial Scales
Long-Term Monitoring of Wintering Whooping Cranes in Coastal Texas, USA
Monitoring Corticosterone of Wintering Whooping Cranes

Muraviovka Park Bird Project
Non-Invasive Biomonitoring of Contaminants in the Endangered White-Naped Crane
Sandhill Crane Long Term Research
The Effect of Hand Rearing on the Gut Microbial Communities and Host Physiology of Whooping Cranes
Tissue Effects of Leg-Mounted Telemetry Devices in Whooping Cranes
Waters for Wildlife: Monitoring the Use of Freshwater Ponds by Wintering Whooping Cranes on Private Lands
Whooping Crane Eastern Partnership: Reintroduction
Wintering Population Monitoring and Conservation of Siberian Cranes at Poyang Lake

MILWAUKEE COUNTY ZOOLOGICAL GARDENS
Education
Adult Lecture
Alive Magazine
Animal Ambassador Programs
Animal Connections Continuum
Animal Encounter
Animals in Action Talks
Behind the Scenes Weekend
Big Brothers Big Sisters Classes
Big Cat Conservation Day
Bonobo and Congo Biodiversity Initiative – Adult Literacy Classes
Bonobo and Congo Biodiversity Initiative – Primary School Support
Cow Milking Demonstration
Early Childhood Teacher Workshops
Endangered Species/S.A.F.E. Day
Family Farm Weekend
Giraffe Feedings
Kids Conservation Club
Kohl’s Wild Theater – All Programming
Mother’s Day – Project M.O.M.
MPS Extended Learning
Nature Play
Oceans of Fun Seal and Sea Lion Show
Party for the Planet
Public Feedings
School Enrichment Programs
Summer Camps
Summer Camps for Community Centers
Wild Things Newsletter
World Bird Sanctuary Birds of Prey Show
World Elephant Day
World Giraffe Day
World Penguin Day
Zoo Classes
Zoo Pride – Animal in Action Talks
Zoo Pride – Behind the Scenes Tours
Zoo Pride – Continuing Education Training
Zoo Pride – Remains to Be Seen Carts
Zoo Pride – Sensory Safari
Zoo Pride – Speakers’ Bureau
Zoo Pride – Walk on the Wild Side Tours
ZOOMobile Tour

Field Conservation
American Association of Zoo Veterinarians (AAZV) – Wild Animal Health Fund
AZA Ape TAG – Conservation Initiative
AZA Avian Scientific Advisory Group (ASAG)
AZA Guam Kingfisher SSP
AZA Panamanian Golden Frog SSP
AZA Penguin TAG
AZA SAFE
AZA Tiger SSP – Tiger Conservation Campaign – Amur Tiger Project
Bat Conservation International (BCI)
Berggorilla and Regenwald Direkthilfe Gorilla Project
Bonobo and Congo Biodiversity Initiative (BCBI)
Cheetah Conservation Botswana
Cheetah Conservation Fund
Elephants for Africa
Florida Reef Tract Rescue Project
Giraffe Conservation Foundation (GCF)

Grand Cayman Blue Iguana Recovery Program
Great Apes Survival Partnership (GRASP) – Funding
Humboldt Penguin Guano Harvest Monitoring
Humboldt Penguin PHVA
IBF: Bongo Repatriation
International Elephant Foundation (IEF)
International Rhino Foundation (IRF)
IUCN/SSC (Species Survival Commission)
IUCN/SSC Conservation Planning Specialist Group (CPSG)
IUCN/SSC Tapir Specialist Group
Jamaican Iguana Conservation Project
Kibale National Park – Fuel Wood Project
Lola Ya Bonobo
Mabula Ground Hornbill Project (MGHP)
Madagascar Fauna and Flora Group (MFG)
Migratory and Resident Avifauna Study
Ocean Spirits Sea Turtle Research
Orangutan Outreach
Polar Bears International (PBI)
Proyecto Tití
Puerto Rico Crested Toad Recovery Program
Red Panda Network – Forest Guardian Program
Red-Necked Ostrich Conservation Support
Ruaha Carnivore Project
Salonga National Park Bonobo Project
Sloth Conservation Foundation (SloCo)
Snow Leopard Trust (SLT)
The Trumpeter Swan Society (TTSS)
Trees for You and Me – AAZK and PBI
Turtle Survival Alliance (TSA)
Whooping Crane Recovery Project
Wild Camel Protection Foundation (WCPF)
Wisconsin Bureau of Endangered Resources Herp Fund
Green Practices

ENERGY
Documented Amount Spent
Documented Amount Used
Generated Renewable Energy On-Site

EXTERNAL SUPPORT
Received Support From External Sources for Green Projects

FOOD
Sourced Local Food or Grew it On-Site

FUEL
Documented Amount Spent
Documented Amount Used

GREEN PRACTICES IMPLEMENTED
Alternative Fuel Usage for On-Site Fleet
Alternative Transportation Benefits for Staff
Building Energy Management
Commingled Recycling
Community-Based Sustainability Projects
Composting (On-Site or Off-Site)
Diverted or Recycled Construction Waste
Energy Submetering
Generated Solar or Wind Energy
Graywater Reuse and/or Rainwater Harvesting
Green IT
Green Purchasing Policy/Green Procurement
Procured Local Food for On-Site Animals and/or Guest
Smart Building Strategies
Stormwater Management Program
Wastewater Reduction
Waterwise Landscaping

WATER
Documented Amount of Wastewater Generated
Documented Amount Spent
Documented Amount Used

Research
Antemortem diagnosis and successful treatment of a complete molar pregnancy in a geriatric bonobo (Pan paniscus)

Bonobo Finger Blood Pressure Project

Cardiac Disease in Western Lowland Gorillas (Gorilla gorilla gorilla): Comparative Assessment of B-Type Natuuretic Peptides From Urine, Capillary Serum, and Venous Serum Samples


Exploring Physiological Correlates of Somatic Growth in Bonobos

Gastric Dilation and Enterotoxemia in Ten Captive Felids

Giraffe Conservation Demography Project: Heights

Interactive Technology Use With Captive Great Apes

Medical Records Review of Black-Footed Cats

Migratory Bird Banding and Monitoring

Prevalence of R/R and Coprophagy in Adult Gorillas

Red Panda Fecal Survey for Newly Discovered Amdoparvovirus

Retrospective Evaluation of Sedation in 16 Lizard Species With Dexmedetomidine-Midazolam With or Without Ketamine

Severe Neurologic Disease and Chick Mortality in Crested Screamers (Chauna torquata) Infected With a Novel Gyrovirus

Snow Leopard Population Health and Record Review

Species and Sex Genetic Testing of Two-Toed Sloths (Choloepus spp.) in the SSP Programs

Tool Use in Pan: Two Modalities, Two Species

Trumpeter Swan Genotyping to Determine Population of Origin

Use of ACE-Inhibitors in Gorillas - Examining a Possible Link to Hepatotoxicity
NORTHEASTERN WISCONSIN (NEW) ZOO & ADVENTURE PARK

Field Conservation
AZA Black-Footed Ferret SSP – Black-Footed Ferret Recovery Program With the United States Fish and Wildlife Service (USFWS)
AZA Red Wolf SSP
Bluebird Recovery Association of Wisconsin On Site Project
Giraffe Conservation Foundation (GFC)
Iowa Trumpeter Swan Restoration Program
Sturgeon Guard Wisconsin Department of Natural Resources (DNR) Program
Wisconsin DNR Elk Restoration Project

Green Practices
GREEN PRACTICES IMPLEMENTED
Building Energy Management
Commingled Recycling
Community-Based Sustainability Projects
Composting (On-Site or Off-Site)
Diverted or Recycled Construction Waste
Energy Submetering
Green Purchasing Policy/Green Procurement
Stormwater Management Program
Waterwise Landscaping

Research
Red Wolf IBD Study

RACINE ZOOLOGICAL GARDENS

Education
AZA FrogWatch USA
Behind the Scenes
Birthday Parties
Conservation Awareness Days
Conservation Education Programs
Conservation Nation
Keeper Chats
Li’l Explorers Preschool at the Zoo
Member Mondays

Slumber Safari
Summer Camp
Volunteer Program
Wildlife Explorers
Wildlife Theater

Field Conservation
American Association of Zoo Keepers (AAZK) – Milwaukee Chapter
AZA Eastern Massasauga Rattlesnake SSP – Mark-Recapture Study on a Michigan Population of Eastern Massasauga Rattlesnakes
International Tiger Day
IUCN/SSC Conservation Planning Specialist Group (CPSG)
Sea Turtle Conservancy
World Giraffe Day
World Rhino Day

Green Practices
ENERGY
Documented Amount Spent
Documented Amount Used

EXTERNAL SUPPORT
Received Support From External Sources for Green Projects

FOOD
Sourced Local Food or Grew it On-Site

FUEL
Documented Amount Spent
Documented Amount Used

GREEN PRACTICES IMPLEMENTED
Commingled Recycling
Community-Based Sustainability Projects
Green Purchasing Policy/Green Procurement
Procured Local Food for On-Site Animals and/or Guest
Wastewater Reduction
Waterwise Landscaping
PLANS, POLICIES, AND BUDGETS

Developed or Updated a Sustainability Plan (or Equivalent)
Developed or Updated a Sustainability Plan

WASTE

Documented Amount Sent to Landfill

WATER

Documented Amount of Wastewater Generated
Documented Amount Spent
Documented Amount Used