



DETROIT ZOOLOGICAL SOCIETY®



DETROIT ZOO • BELLE ISLE NATURE ZOO

WINTER 2016

Community Impact Report



The mission of the Detroit Zoological Society is to:

Demonstrate leadership in wildlife conservation and animal welfare.

Provide a broad audience with outstanding and unique educational opportunities that lead to the appreciation and stewardship of nature.

Inspire our community with engaging, meaningful and memorable experiences.

Provide innovative zoological facilities that contribute to the region's economic vitality.

Demonstrate organizational excellence consistent with a commitment to outstanding service, progressive resource management and environmental leadership.

Our Statement of Purpose: *Celebrating and Saving Wildlife*

Even if you don't visit often, it is easy to experience the impact of the Detroit Zoo. From awe-inspiring animals and beautiful, natural surroundings to friendly staff and knowledgeable volunteers, guest of all ages are inspired, educated and enthralled by a day at the Zoo. But the full impact of the Detroit Zoo is broader, deeper and less well known. Much of our work happens behind the scenes as well as throughout our local community and beyond.

We reach outside our borders to give back to the community which so generously supports us. For example, each year Zoo staff, volunteers and even some guests give blood to the Red Cross, organize clothing drives for the Salvation Army, donate toys to Toys for Tots and collect canned goods for Gleaner's Community Food Bank. Our "Day at the Zoo" field trip program provides access to the Zoo for underserved children across the metropolitan Detroit area.

The Detroit Zoo offers unique education programs such as "City Critters," a humane education program for young children which builds understanding, empathy and curiosity about animals in their neighborhood, as well as "Tomorrow's Leaders Today" that engages fifth through eighth grade students and teachers with zoo-inspired STEM (science, technology, engineering and math) careers.

The Detroit Zoo is an environmental sustainability leader in metro Detroit and in the zoo community through our Greenprint. One major initiative has been the phase-out of bottled water sales at the Zoo, helping to keep more than 60,000 single-use bottled water containers out of area landfills annually. The Zoo has also adopted an innovative, sustainable waste-to-energy technology: a biodigester that converts manure into methane gas to heat and cool our animal hospital.

Our mission of *Celebrating and Saving Wildlife* has regional, state, national and international impact through our partnership in dozens of cooperative programs to ensure the long-term survival of animal populations. Our participation in local conservation programs for the Karner blue butterfly, Great Lakes piping plover, osprey, mudpuppy, common tern and eastern massasauga rattlesnake makes the Zoo an unmistakable leader in wildlife conservation in southeast Michigan and across the state.

Contributing further to the overall impact of the Detroit Zoo are the benefits the Zoo provides to metro Detroiters. Residents of Wayne, Oakland and Macomb counties are eligible for a \$10 discount when purchasing annual Zoo memberships. Students also receive discounted admission and senior citizens are admitted free twice a year on special Senior Days. More than 400 Detroit Zoo employees contribute to the annual overall economic impact measured at more than \$100 million, helping to drive the metro Detroit economy.

We are grateful for all those who visit our facilities, partake in our programs, events and outings, and provide financial support for our mission and work. This Community Impact Report is our opportunity to share some of the ways the Detroit Zoological Society impacts the region, the nation and the world.

Thank you.



Ron L. Kagan
Executive Director/CEO



Lloyd A. Semple
Chairperson

The Detroit Zoological Society operates the Detroit Zoo and Belle Isle Nature Zoo.

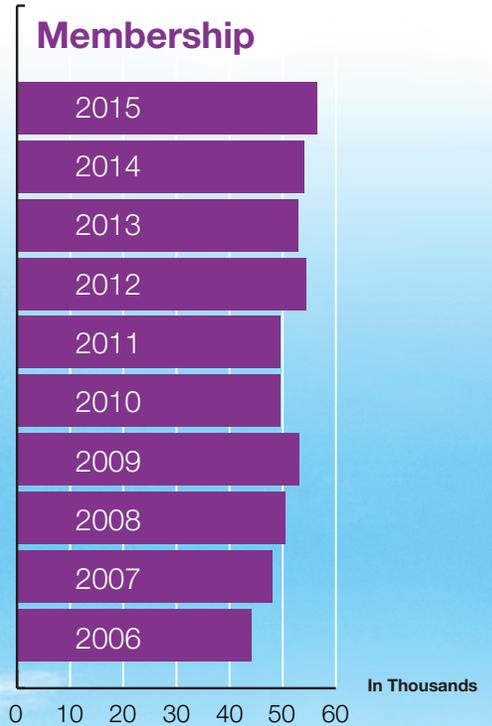
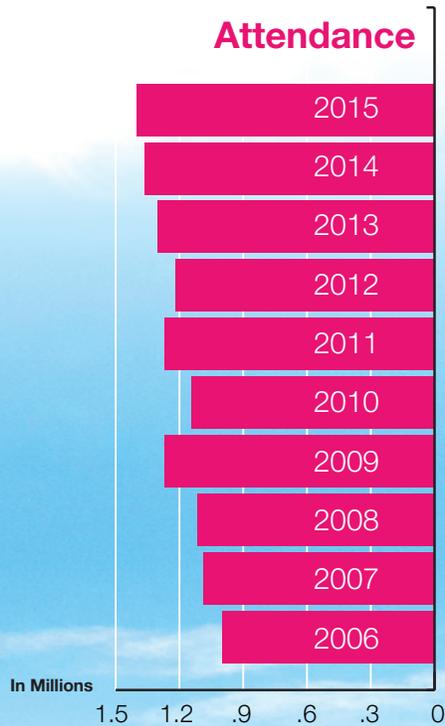
For more than 85 years,

the Detroit Zoological Society has served the metro Detroit community, in both well-known and quiet ways.

10 consecutive years with attendance of more than 1 million visitors
Single largest paid family attraction in Michigan

2015 attendance – 1,476,378

Memberships over 56,000 households in 2015



THE DZS FACT SHEET

Visitors come from every county in the state, every state in the country and from more than 40 countries



More than 230,000 Facebook fans

Home to more than 2,400 animals of 255 species

Situated on 125 acres with naturalistic habitats



Major habitats include the Polk Penguin Conservation Center, Arctic Ring of Life, Australian Outback Adventure, Great Apes of Harambee, National Amphibian Conservation Center, Holden Reptile Conservation Center and Cotton Family Wolf Wilderness.

BELLE ISLE NATURE ZOO®



DETROIT ZOOLOGICAL SOCIETY

Situated on several acres
of a 5-acre site surrounded
by undisturbed forested
wetlands

- Focuses on Michigan flora and fauna
- Offers family nature programs and education programs for school and community groups
- More than 83,000 visitors in 2015



\$35 million annual
operating budget in 2015

Contributes **more than \$100 million**
annually to the regional economy

400 employees



More than 1,100 volunteers who donated more than 103,000 hours of service with a value of \$2.3 million in 2015



Working with, in and for the community

Over the years, the DZS has worked in partnership with numerous organizations to benefit the community. Recent examples of some of these partnerships include the following:



- ACCESS – annual summer camp attendees and expanding ongoing education programming



- American Red Cross blood drives twice a year



- Autism training provided to DZS and several community partners including Detroit Homeland Security, police departments from Detroit, Farmington Hills, Grosse Pointe, Harper Woods, Huntington Woods and others by the Autism Alliance of Michigan

- Big Brothers Big Sisters – science programming for mentors and mentees



- Boy and Girl Scouts – providing opportunities to earn merit badges at the Detroit Zoo and Belle Isle Nature Zoo



- “City Critters” humane education outreach program for approximately 1,800 students in their classrooms each year

- Community education meetings held at the Zoo on transit issues in conjunction with the Regional Transit Authority and Better Transit, Better Business



culturesource

- CultureSource workshop for cultural/ arts professionals held at the Detroit Zoo
- Day at the Zoo – more than 600 underserved students attending schools in Wayne, Oakland and Macomb counties

- Department of Natural Resources – environmental stewardship interns at the Belle Isle Nature Zoo



- Detroit Area Pre-College Engineering Program (DAPCEP) – offering STEM and career programming for Detroit-area teens



- Detroit Dirt – zero waste supporting partner and composter for DZS
- Detroit Public Schools – curriculum-based programming for all first graders



- Detroit Symphony Orchestra, Children’s Choir – performances at the Zoo

- DZS Green Literacy project partnering with Clinton River Watershed Council, DTE Energy, Lawrence Technological University, The Nature Conservancy and Wayne State University

- DZS operations powered with 100% renewable electricity from wind farms, thanks to the support of ITC Holdings Corp.



- Educational outreach programs and plush animal giveaways at DMC’s Children’s Hospital of Michigan, Beaumont Hospital – Royal Oak and C.S. Mott Children’s Hospital



- Electronic waste recycling – collecting TVs, computers, monitors, printers and more



- Free tickets distributed to more than 1,500 local nonprofits including United Way for Southeast Michigan, Detroit Recreation Department, Boys & Girls Club of Southeastern Michigan, Big Brothers Big Sisters and others



- FROGWATCH USA local conservation efforts
- Macomb Community College student veterinarian workshop



- Gleaner's Community Food Bank – 9,000 lbs. of food collected at Bunnyville
- Great Lakes Task Force forum with local conservation groups and Congresswoman Stabenow at the Belle Isle Nature Zoo



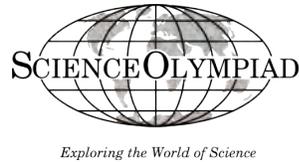
- GreenFest participating partners include Alliance for the Great Lakes, Arts and Scraps, Birmingham Schools, Forgotten Harvest, Greening of Detroit, Humane Voters of Michigan, Huron-Clinton Metroparks, Michigan Sea Grant, Snow Leopard Trust, Southeast Michigan Land Conservancy and U.S. Forest Service



- Independent Sector regional meeting on trends impacting the cultural/arts community held at the Zoo



- Insite the RIOT (Revolution In Our Thinking) and Urban Stringz – performances at the Zoo
- Institute for Humane Education (IHE) – workshops at the Zoo



- Macomb Science Olympiad – DZS staff served as event coordinators for competitions for elementary, middle and high school students in both Macomb and Oakland counties



- Madonna University – humane education interns/biannual CZAW service learning projects for Madonna's "Do Animals Matter" course



- "Meet Your Best Friend at the Zoo" – one of the nation's largest remote animal adoption events with more than 21,000 dogs, cats, puppies and kittens adopted since 1993



- "Metro Detroit Youth Day" – annual event on Belle Isle

- Michigan Department of Transportation, Road Commission for Oakland County and Zoo partnership to improve traffic flow around Zoo



- Michigan Opera Theater performances at the Zoo
- Michigan State University veterinarian students support DZS career exploration programming



- Michigan Veterans Affairs Agency recognizes DZS as a Bronze Level Veteran Friendly Employer

- Oakland University – pre-service teachers provide DZS "City Critters" programming for Detroit area schools/interns assist with script writing for educational productions

Oakland County
Children's Village Foundation

- Oakland County Children's Village – DZS works with juvenile detainees on connecting with wildlife and wild places (Humane Education Horticulture Program)
- Partnering with U.S. Forest Service, Michigan Department of Natural Resources, Grand Valley State University, Little River Band of Ottawa Nation to study repopulation efforts of American marten and conservation efforts in Michigan



- Pewabic Pottery – Nature Camp partnership at the Belle Isle Nature Zoo
- Pontiac School District, Warren Community Schools and Detroit Public Schools – students participate in STEM career exploration programming at the Zoo



- Salvation Army – annual clothing/ household goods drive
- “Science Cafes” held at the Detroit Zoo support dialogue between scientists and Zoo visitors



- SOCRRA – municipal corporation of 12 communities in south Oakland County partnering with the DZS in recycling and waste management



- Straw donation to C.H.A.I.N.E.D. (Continue Helping Animals In Need & Educating Dog owners) Detroit and Dog A.I.D. (Assistance In Disability) with upcycled straw from the Zoo
- Summer camp opportunities for youth from kindergarten through high school that focus on project-based learning and inquiry, hands-on activities and life science concepts for more than 1,000 participants

- Supporting partners for the first zoo-based biodigester at the Detroit Zoo include Albert Kahn Associates, Inc., Michigan Economic Development Corporation, Michigan Department of Environmental Quality, Michigan Energy Office and Michigan State University, Biosystems and Agriculture Engineering Department



- TerraCycle – DZS community partner for difficult-to-recycle waste



- Toys for Tots – DZS and SSA employees and volunteers toy drive program



- Ugandan Children's Choir – performances at the Detroit Zoo



- U.S. Fish and Wildlife Service partnership on local conservation programs
- Utica Community Schools – long-term relationship for grade level, district-wide programming with DZS



- Warren Consolidated Schools – curriculum-based programming for all first-graders at the Zoo

- Waterford School District – curriculum-based programming for all kindergartners at the Zoo



- Wayne County Community College District veterinarian programs with Zoo veterinarian staff

Our Role in Conservation

The Detroit Zoological Society conducts or supports field conservation in a number of local, national and international field programs. Our local conservation agenda includes conducting field conservation work as well as partnering with more than 20 non-governmental organizations, state and municipal agencies, and universities to utilize our unique resources and skills in captive management, veterinary care and education to save Michigan wildlife.

Local Conservation Programs:

Common Tern

Since 2007, the DZS worked to restore a colony of common terns on Grosse Isle and monitor the nesting habitat on Belle Isle. In 2015, nesting pairs used the new Belle Isle nesting site and chicks fledged. Continued work on predator exclusion is planned to help ensure a successful return of these birds to Belle Isle.

Mudpuppy

Since 2006, the Detroit Zoological Society has monitored mudpuppies in the Detroit River to understand the population size and health of local populations. Mudpuppies are important environmentally sensitive indicators of the health of the Detroit River.

Blanding's Turtle Headstarting

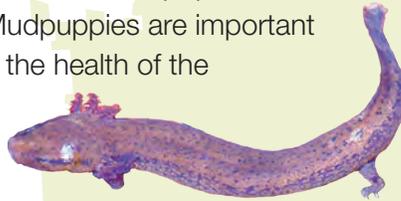
The DZS works with several organizations and the Shiawassee National Wildlife Refuge to augment the declining population by "headstarting" Blanding's turtle hatchlings at the Detroit Zoo.

Piping Plover Captive Rearing

The DZS developed and manages a captive breeding program to hatch abandoned eggs of endangered Great Lakes piping plovers as part of federal recovery program for the species.

Eastern Massasauga Rattlesnake

The Eastern massasauga rattlesnake is considered a "species of special concern". The Detroit Zoo contributes to field work with a population of massasaugas in southwest Michigan to determine abundance and establish a long-term monitoring program.



Beyond Our Area:

Additional examples of how DZS participates in conservation programs with local, national and international impact:

Local/State

Karner blue butterfly
Peregrine falcon
Osprey
American marten
Kirkland warbler
Trumpeter swan
Marsh tern



National/International

Puerto Rican crested toad
Panamanian golden frog
Partula snail
Polar Oceans Research Group
Falklands Conservation
Red panda and snow leopard
Gorilla Rehabilitation and Conservation Education (GRACE)
Wyoming toad

Education Programs

The Detroit Zoological Society (DZS) provides outstanding and unique educational experiences for guests and the community. We support a broad audience that includes teachers, students, scout groups, families and community organizations. Our philosophy of education focuses on providing opportunities for visitors of all ages to build foundations of inquiry, environmental stewardship, humane education, resource management and sustainability.

Humane education is a fundamental philosophy for the DZS. It provides a lens for our thoughts, language and program development. Our community relationships and our publications focus on both animal welfare and humane education and help to drive our passion to create awareness for these important facets of our mission.

Berman Academy for Humane Education

The DZS's Berman Academy for Humane Education was created to "help people help animals" – it is the only one of its kind in any zoo, and is the foundation on which all of the Zoo's education initiatives and activities are developed. For more than six years, the Berman Academy for Humane Education has led a program with Oakland County Children's Village that helps to instill reverence and respect for wildlife and wild places with teenage boys residing there. Children's Village includes secure detention, residential treatment and shelter care services. We've worked with hundreds of teens through the course of this program, and it has been transformational for many of them.

Early Learners

The Detroit Zoo and Belle Isle Nature Zoo provide programming to encourage our youngest guests to explore the natural world. "Zoo Tots" exposes kids to different types of animals, habitats and the outdoors through sensory play, literacy, crafts and games. "Nature Tots," modeled from the very successful "Zoo Tots" program, encourages families to spend time outdoors together while exploring nature through reading, hands-on exploration and art.

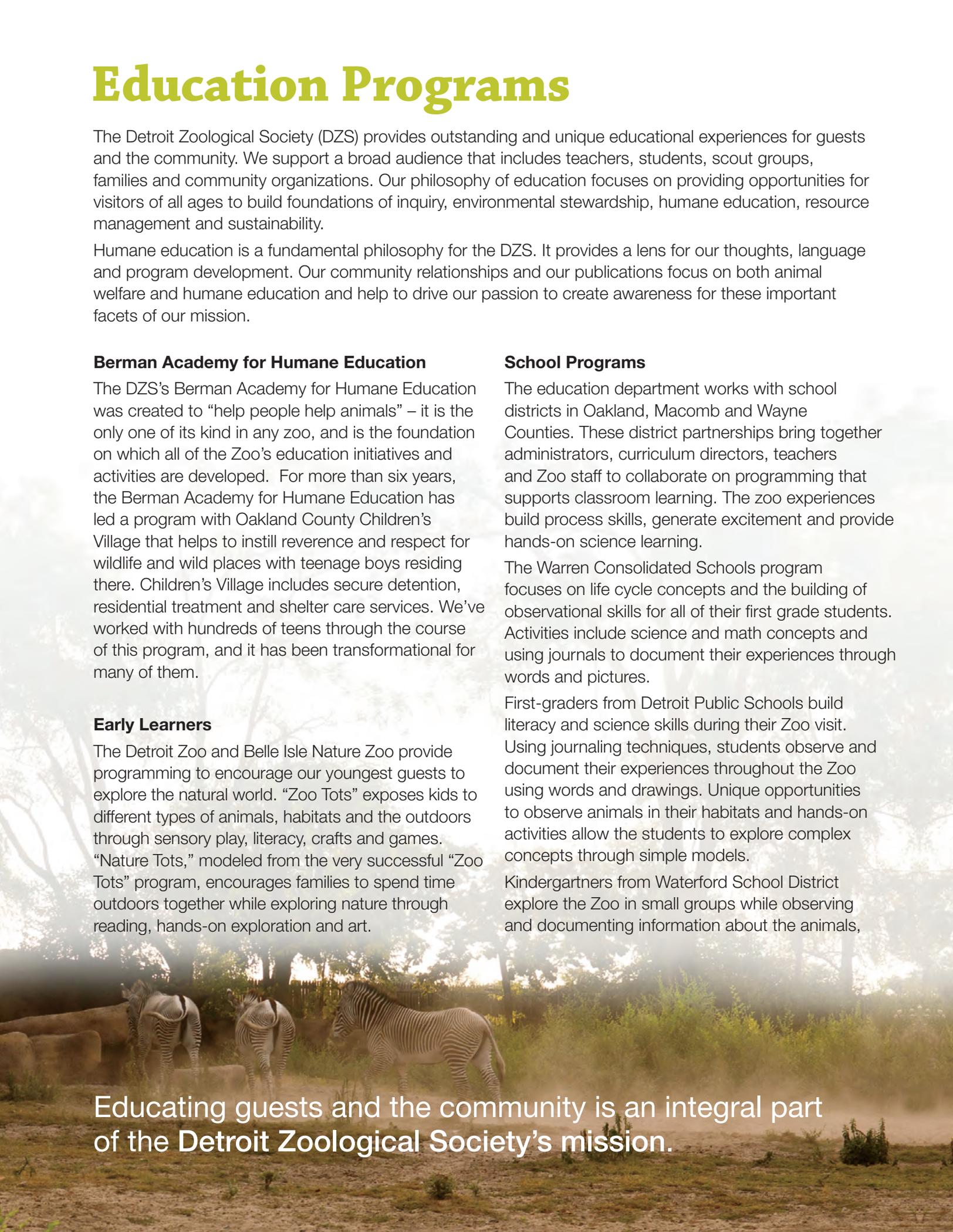
School Programs

The education department works with school districts in Oakland, Macomb and Wayne Counties. These district partnerships bring together administrators, curriculum directors, teachers and Zoo staff to collaborate on programming that supports classroom learning. The zoo experiences build process skills, generate excitement and provide hands-on science learning.

The Warren Consolidated Schools program focuses on life cycle concepts and the building of observational skills for all of their first grade students. Activities include science and math concepts and using journals to document their experiences through words and pictures.

First-graders from Detroit Public Schools build literacy and science skills during their Zoo visit. Using journaling techniques, students observe and document their experiences throughout the Zoo using words and drawings. Unique opportunities to observe animals in their habitats and hands-on activities allow the students to explore complex concepts through simple models.

Kindergartners from Waterford School District explore the Zoo in small groups while observing and documenting information about the animals,



Educating guests and the community is an integral part of the Detroit Zoological Society's mission.



their habitats and what they need to survive and thrive. The hands-on component allows students to design model habitats for animals based on their observations and learning experience. Teachers incorporate and expand upon the experiences when they return to the classroom.

Out of School Time

Initiatives such as Tomorrow's Leaders Today (TLT) and our partnership with Detroit Area Pre-College Engineering Program (DAPCEP) engage middle school students with zoo-inspired science, technology, engineering and math (STEM) education. Through hands-on learning, TLT and DAPCEP expose participants to the possibility of careers in earth sciences, animal welfare, wildlife conservation, microbiology, veterinary medicine and other exciting life-science fields. Sparking a connection with students' daily studies and the world we live in can lead to meaningful STEM college opportunities and career paths. Middle school is a time when a lot of children lose confidence in their science and math abilities. Through these programs, we re-engage them in ways that not only build their confidence, interest and understanding but inspire them to look to new career paths.

Adult and Family Programming

Through our Science Communication Fellowship program, scientists are recruited from universities and colleges throughout the state to participate in a workshop series that helps them to create dialogues to discuss science with the public. The scientists learn to use hands-on activities and communication strategies throughout the program. This increases science literacy for all citizens and starts to address stereotypes associated with science and scientists. Family-oriented programs allow participants to experience the Zoo in an in-depth way. Monthly programs highlight specific themes or eco-regions of the Zoo. These programs allow families to spend time together and create memories from experiences that encourage exploration.



Greenprint

The Detroit Zoological Society is creating a healthier environment for animals, visitors and the community through the DZS Greenprint - our unique, green roadmap for facilities, practices, programs and policies. Our Green Journey to environmental sustainability – which began with critical species conservation work – now focuses on reducing our environmental impact and advancing regenerative solutions. The DZS is committed to being an environmental leader, an active educational resource and showcase in the community for best environmental policy and action by integrating literacy, awareness and responsibility in operations and facilities.

Phase-out of bottled water

As of October 2015, the Detroit Zoo no longer sells bottled water at our concessions or in vending machines due to the overwhelming negative impact plastic bottles have on the environment. We encourage everyone to bring reusable containers that can be refilled for free at any of our 20 filtered water refill stations throughout the Zoo. By eliminating bottled water, the DZS is helping to prevent 60,000 plastic bottles – the quantity previously sold at the Zoo annually – from entering the waste stream and the environment.

Improving energy efficiency

Over the last two years, the DZS has invested \$3 million into energy efficiency projects. Projects include electrical, light and water changes to our buildings and habitats, which not only saves energy but also provides more natural habitats. Utility upgrades now span to more than 50 Detroit Zoo buildings and include the installation of low-flow toilets, replacement of most boiler systems and upgrades to energy-efficient LED lights. These award-winning efficiency measures not only save money, but also provide valuable educational opportunities for our 1.4 million visitors by demonstrating personal application.



Are you thirsty for the facts?

What does it take to produce one plastic bottle?

1

=

25%
OIL

1

WATER

2

WATER

3

WATER

Three Full Bottles of Water

#DitchTheBottle

DZS Greenprint Sets Zero-Waste Goal by 2020

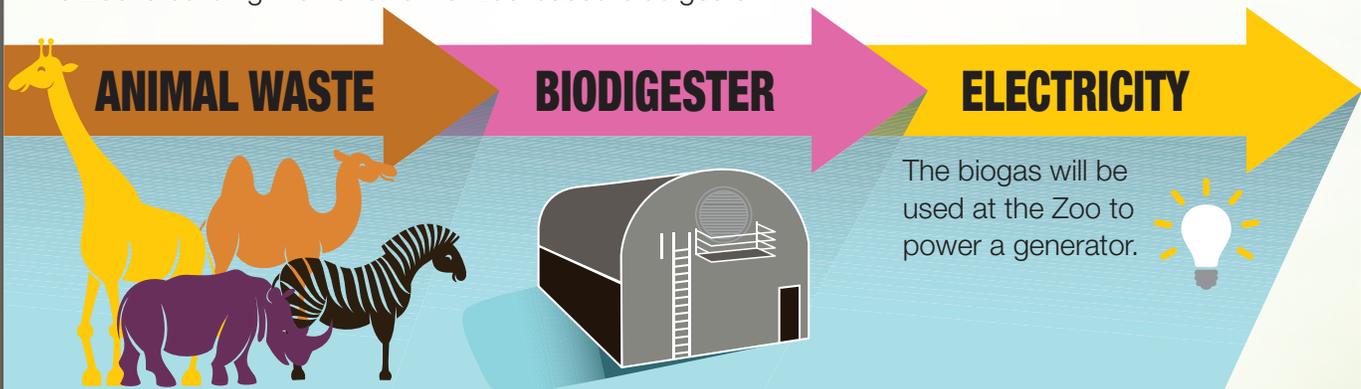
As part of our Greenprint strategic plan, the DZS has set a bold goal to be zero-waste by 2020. To achieve this, we are focusing on reducing consumption, reusing goods and increasing recycling to prevent excess trash in landfills.

Innovation

The DZS is pioneering an advanced waste-to-resource project, which replaces an incinerator with the first dry biodigester in Michigan and the only zoo-based anaerobic digester in the U.S. This system can compost 400 tons of animal waste annually while capturing methane to be used as a renewable energy source to help power the Ruth Roby Glancy Animal Health Complex (our veterinary hospital). Energy savings are projected to be \$70-80,000 a year and the system also converts manure into compost that is used to fertilize animal habitats, gardens and public spaces throughout the 125-acre Zoo.

HOW ANIMAL POO CAN POWER THE ZOO

Animals at the Detroit Zoo produce more than a ton of manure a day. Instead of paying to truck it away, the Zoo is building the nation's first zoo-based biodigester.



More than a ton of animal waste will be collected each day from various Zoo habitats.

Animal waste is kept in the digester vessel at 100 degrees for 28 days, allowing it to be digested by microbes. This converts waste into biogas.

FERTILIZER AND COMPOST FOR ZOO GROUNDS

After digestion, the leftover waste material is used at the Zoo as fertilizer or compost.

SOURCE: Dana Kirk, Biosystems & Agricultural Engineering, Michigan State University.

Join us on our journey

As an educational institution, the DZS is committed to sharing our experiences with colleagues and the community so that all of southeast Michigan can join us on our and their own journey to advancing sustainability. We continue to work with our friends in the region to advance green literacy in the community and work together to develop targeted programs that build environmental awareness and action among our visitors and neighbors. Together we can all reduce our environmental impact and grow closer to a sustainable future.





2015 DZS Achievements/Recognition

The Detroit Zoological Society is frequently recognized for its programs, operations, management, wildlife conservation and animal welfare. Some examples of recognition recently received:



DZS was named the 2015 Best-Managed Nonprofit by Crain's Detroit Business, winning the publication's top honor for exceptional mission-driven management practices.



Four star rating for sound fiscal management, *Charity Navigator*



Gold-level sound fiscal management, *GuideStar*



Green Award, *Association of Zoos & Aquariums*



Excellence in Diversity Award, *Association of Zoos & Aquariums*



Advocate of the Year, *Michigan League of Conservation Voters*

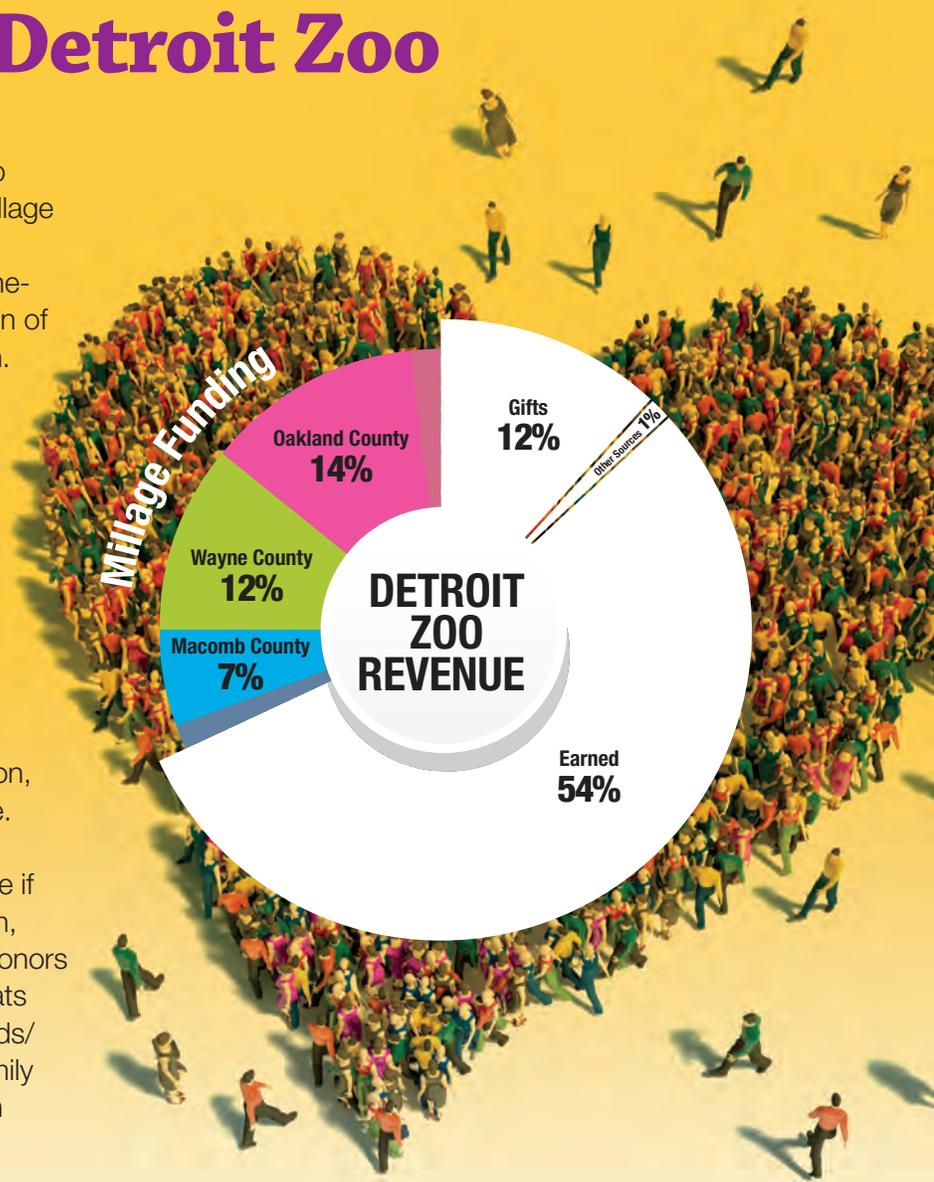


Bronze Level Veteran Friendly Employer, *Michigan Veterans Affairs Agency*

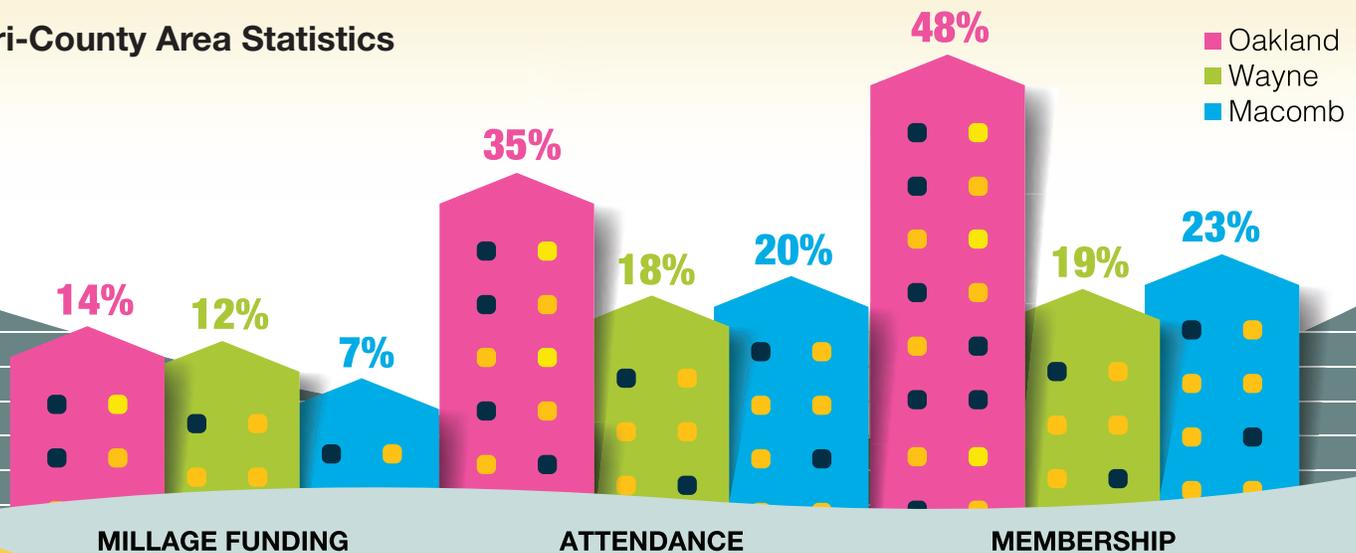
Support of the Detroit Zoo

In 2008, voters in Wayne, Oakland and Macomb counties overwhelmingly approved a modest millage (less than \$10 per year for most households) to support the Detroit Zoo. The millage provides one-third of Zoo revenue and is a significant indication of the community's support to this iconic institution.

The millage is a stable and essential source of revenue that has been the catalyst to the reinvigoration of the 88-year-old institution. It enables safe, quality operations as well as addressing important maintenance of public and animal facilities. Further, the financial security provided by this support has allowed Zoo leaders to turn their eyes to the future by revising its master plan. Signs of the plan's implementation are clearly seen in significant additions such as the 4-D Theater, Events Pavilion, lion habitat renovation and Science On a Sphere. While new animal habitats are funded by private donations, such philanthropic gifts are only made if donors are confident in an organization's mission, operations and impact. Since 2008, confident donors have assisted the Zoo in establishing new habitats that include the Carousel, Cotton Family Wetlands/ Boardwalk, Warchol Beaver Habitat, Cotton Family Wolf Wilderness and Polk Penguin Conservation Center.



Tri-County Area Statistics



Detroit Zoological Society's Board of Directors - 2015

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How Good is DZS?



DZS was named the 2015 Best-Managed Nonprofit by Crain's Detroit Business, winning the publication's top honor for exceptional mission-driven management practices.

Four Star Rating from Charity Navigator



DZS received an "exceptional" designation after earning the highest possible rating – four out of four stars – for the fifth consecutive year for sound fiscal management and commitment to accountability and transparency from the nation's largest independent evaluator of nonprofit organizations.

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To view this report online, visit
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