



# we're here for life

protecting species & biodiversity



annual report  
**2015**

## Chair's / CEO's message



As we reflect back, 2015 was a year of both significant accomplishments and an historic moment.

In 2013, giant pandas Er Shun and Da Mao arrived at the Toronto Zoo for a five-year stay, as part of a global giant panda conservation breeding program. The birth of healthy twin giant panda cubs in 2015 was a testament to the dedication of Zoo staff and our international partners.

While the births of these panda cubs generated the most global interest, we had many other conservation breeding successes, including Canadian species such as the eastern massasauga rattlesnake, Blanding's turtle, wood bison, polar bear and more.

The Toronto Zoo Board of Management also approved the new five-year Strategic Plan, which includes a new mission and vision for the Zoo with a renewed focus on becoming a Zoo-based conservation centre of excellence. The goals and objectives set out in this plan have a clear roadmap to ensuring the Toronto Zoo remains a leader in wildlife conservation, education and scientific research.

In 2015, the Zoo started construction on a new, 32,000 square foot state-of-the-art Wildlife Health Centre. The centre will be purpose-built to respond in every way to the needs of our animals and those who care for them. In addition to the health care services, the Wildlife Health Centre is also home to the Zoo's reproductive physiology lab, numerous conservation breeding programs, turtle head start programs, Amphibian Rescue Centre (ARC), veterinary residency program, high school co-op programs and many research projects with universities, colleges, government and non-government agencies including the University of Toronto Scarborough, University of Guelph, Parks Canada and both the provincial and federal governments.

While we are proud of the accomplishments from this year, we look forward to 2016 with a renewed hope for the future of biodiversity on our shared planet and the critical role the Toronto Zoo plays to ensure the ongoing survival of so many of the world's most vulnerable and endangered species.

*– Joe Torzsok, Chair & John Tracogna, Chief Executive Officer*



# baby pandas!

## a global pregnancy

On October 13, 2015, the Zoo's female giant panda, Er Shun, successfully gave birth to twin cubs. Er Shun and male giant panda, Da Mao, arrived at the Toronto Zoo in March, 2013 as part of a giant panda conservation breeding program. The birth was the result of advanced artificial insemination techniques that involved the Zoo's high level of expertise and the support of international leaders in giant panda breeding from the Chengdu Research Base of Giant Panda Breeding in China. A combination of frozen semen from Chinese giant pandas along with fresh and stored semen from Da Mao was used to impregnate Er Shun. The pregnancy and birth of the cubs is a wonderful example of how concern for our planet can lead to valuable partnerships and international cooperation.

**giant pandas  
back from the brink  
of extinction**

**1,000**

approximate number  
of giant pandas in the wild, 1979

**1,864**

giant pandas in the wild, 2014

**giant panda  
insurance population**  
giant pandas in human care worldwide

**376**

in 2014

**425**

in 2015

When there are 500 giant pandas in human care,  
efforts to repopulate giant pandas into the wild  
can be ramped up





day  
1



day  
7



day  
26



day  
35



day  
40

# baby pandas!

## a global pregnancy

Once the giant panda twins were born, a rigorous, round-the-clock program of “twin-swapping” care was implemented to ensure that both cubs were able to thrive. Thanks to the all-out efforts of Zoo staff, a visiting group of experienced giant panda maternity specialists from the Chengdu Research Base of

Giant Panda Breeding in China, and of course first-time mom Er Shun, the twins were well on their way to becoming healthy, robust individuals by the end of the year. Er Shun proved to be a model mother and the sleep-deprived human team was inspired by her loving care and gentle handling of the tiny cubs.

### twin-swapping

Giant panda mothers cannot care for two cubs in the wild and typically reject one cub if twins are born. The giant panda cub team used a technique called twin-swapping that alternated nursing and bottle-feeding, allowing each cub to have one-one-one bonding time with Er Shun.

The approach was successful, but was Er Shun in on the trick? We'll never know for sure...



# Toronto Zoo Strategic Plan



In 2014, the Zoo unveiled a new five-year strategic plan. The new plan established both a new mission and vision for the Zoo and a new set of core values and objectives to guide the organization forward. As Mr. John Tracogna, Chief Executive Officer put it, “We have always been committed to wildlife conservation and this new plan provides us with a renewed focus with an emphasis on Canadian species.”

The Toronto Zoo’s Strategic Plan includes mission, vision and value statements, as well as a set of goals, that define a steadfast commitment to conservation of wildlife and habitats. In 2015, the Zoo made significant strides in implementing and refining the execution of the Strategic Plan.

**vision**  
Canada’s national leader in saving wildlife to ensure the rich diversity of nature for future generations.

**mission**  
A living centre for education and science, committed to providing compelling guest experiences and inspiring passion to protect wildlife and habitats.

## core values

**excellence** Ensuring the highest standard of care for wildlife, providing excellent guest service and creating fun and transformational experiences that connect people to nature.

**conservation** Committed to practicing and promoting activities and actions that benefit wildlife and the environment.

**innovation** Encouraging creativity. Striving to think differently and turn ideas into actions.

**collaboration** Fostering respect and teamwork among staff, volunteers and our partners to achieve our mutual goals.

**integrity** Committed to transparency, best practices and leading by example.

**passion** Proud, energetic and passionate about saving wildlife. Inspiring others to value the critical role of our Zoo.

## goals

- 1 Advance to a zoo-based conservation centre of excellence
- 2 Enhance the guest experience to appeal to a more diverse audience and inspire conservation action
- 3 Build an organization that is fiscally and environmentally sustainable for the long term
- 4 Maximize existing partnerships and identify new opportunities
- 5 Enhance the governance structure
- 6 Create an organizational culture that attracts, engages and retains highly motivated staff and volunteers
- 7 Increase awareness, understanding and support of the Zoo as a centre for conservation excellence

# goal 1

## Advance to a zoo-based conservation centre of excellence



### endangered species born at the Zoo in 2015

## new babies, new hope

The Toronto Zoo is well-known as a terrific place to visit, but much of the important work that the Zoo does takes place behind the scenes. Breeding endangered species is a vital part of protecting the world's bio-diversity and, in many cases, has enabled a struggling species to be re-established in the wild. In 2015, our advances in breeding techniques and artificial insemination technology resulted in a baby boom of critically endangered species here at the Zoo. Some, such as our 9,000 Puerto Rican crested toad tadpoles, are already busy repopulating protected habitats, while others, such as the giant panda cubs, are part of a growing population that will regain its wild status once a critical mass of individuals is reached. The Zoo's research and involvement in conservation partnerships is making a difference in initiatives such as our Blandings turtle headstart program that saw 36 year-old turtles released into the Rouge River area in 2015.

- 4 African white lion**
- 1 polar bear**
- 2 giant panda**
- 1 brush-tailed bettong**
- 36 eastern loggerhead shrike**
- 6 eastern massasauga rattlesnake**
- 7 Panamanian golden frog**
- 9,000 Puerto Rican crested toad**
- 21 Blanding's turtle**
- 2 Malaysian painted turtle**



# goal 1

## Advance to a zoo-based conservation centre of excellence

The new state-of-the-art Wildlife Health Centre symbolizes the Toronto Zoo as being a centre of excellence for high-quality veterinary care, reproduction and wildlife research. In addition to the health care services, the

WHC is also home to the Zoo's reproductive physiology lab, numerous conservation breeding programs, turtle headstart programs, Amphibian Rescue Centre (ARC), veterinary residency program, high school co-op programs and many research projects with universities, colleges, government and non-government agencies.

– John Tracogna, CEO, Toronto Zoo

**5,000+**

**veterinarian procedures at the Zoo  
keep our residents alive and healthy**

**32,000**

**square feet of new life-saving facilities**

### new Wildlife Health Centre takes shape

In 2015, construction of the Zoo's new state-of-the-art Wildlife Health Centre began. This project is an investment in the care and well-being of our animals. Creating a state-of-the-art animal healthcare facility is at the heart of our expanded vision and will position the Toronto Zoo as a world leader in wildlife care and conservation.

The design includes leading-edge sustainable construction techniques, materials and technology, with the goal of achieving LEED silver certification. The almost 32,000 square feet of interior space – nearly double the current space – will be easy to maintain in a hygienic state and provide ample room for handling animals, post-operative care and modern diagnostic and research equipment. Veterinary staff will be able to treat larger species such as gorillas at the Centre rather than in their exhibit. A viewing area for visitors on private guided tours will provide a behind-the-scenes look into wildlife care and conservation research.

## goal 2

Enhance the guest experience to appeal to a more diverse audience and inspire conservation action

# the Toronto Zoo so many things to so many people

In 2015, the Zoo was committed to giving our guests the best possible experience and opening their eyes to the urgent need for conservation action. Visitors in 2015 experienced enhancements such as new interactive exhibits such as the new indoor giraffe house and cheetah run, face to face encounters through our keeper talks, new animals including the Ankole-Watusi blue wildebeest, and Kiko the giraffe, improved educational content, new engaging graphics and new food options onsite including Subway, Dairy Queen, Booster Juice and Smoke's Poutine.

Also, our commitment to conservation was demonstrated by animal enrichment initiatives such as the new giraffe house, the many babies being born at the Zoo, sustainable actions on site such as our advanced waste reduction efforts and also by our support for external conservation activities. The Zoo is much more than a place to visit – it's a family!



school group visitors  
**102,931**

Zoo Camp participants  
**1,811**

Bush Camp participants  
**2,866**

Zoo workshop attendees  
**10,652** students

**4,331** educators

**350** Scouts, Guides,  
Brownies and Cubs

# goal 3

**Build an organization that is fiscally and environmentally sustainable for the long term**

In 2015, the Zoo demonstrated its commitment to financial responsibility by reducing expenses without sacrificing its environmental, educational and research goals. The Zoo also continued its ambitious program of creating an environmentally responsible workplace. At the Zoo we “walk the walk” when it comes to greening our operations!

**decreased operating expenses by**  
**\$502,348**

**2015 total expenses \$46,816,323**  
**2014 total expenses \$47,318,671**

**under budget by \$4,860,326**  
**\$4,860,326**

**budget: \$50,594,100**  
**actual: \$45,733,774**

- reduced paper waste
- new rain garden improves water conservation
- the Zoo hosted two e-waste collection days, collecting over 6,000 tonnes of general e-waste
- to date, the Zoo has collected and recycled more than 30,000 cell phones



# goal 4

## Maximize existing partnerships and identify new opportunities

# our partners make us stronger

Partnering with other like-minded organizations benefits the Zoo in many ways. In 2015, the Zoo expanded its long-standing relationship with Pizza Pizza Limited, initiated planning with the new Rouge National Urban Park, worked with the University of Guelph on ultrasounding pregnant animals and developed a crime-fighting program with Crime Stoppers. The Zoo has numerous ongoing partnerships and these are just a few examples of how working together is great for everyone.

# \$250,000

Pizza Pizza Limited donation to new Zoo Wildlife Healthcare Centre. John Tracogna, the Zoo's CEO said, "We have had a long-standing relationship with Pizza Pizza and their donation towards this critical project will have a direct impact on our continued efforts to ensure the ongoing survival of many of the worlds' most vulnerable and endangered species."



# 12,356 acres

The Zoo is working with its new next door neighbor, the Rouge National Urban Park, to develop joint environmental and conservation initiatives

# 100+

Number of ultrasounds. Ontario Veterinary College at University of Guelph worked with the Zoo to ultrasound pregnant Zoo animals such as our giant panda mom, Er Shun

# \$30 billion

Annual illegal wildlife trade, on par with the illegal trade in guns, drugs and people. Toronto Zoo and Crime Stoppers launched a new campaign to combat the illegal harvest and trade of turtles

# goal 4

## Maximize existing partnerships and identify new opportunities

### Our greatest partners are our regular donors! Thank you to all who generously supported the Zoo in 2015

#### **Benefactors**

(\$250,000 - \$499,999)

Environment Canada

#### **Guardians**

(\$100,000 - \$249,999)

Barrick Gold Corporation

Ministry of Tourism, Culture and Sport

#### **Conservators**

(\$50,000 - \$99,999)

The Estate of Mary Millard

Pizza Pizza

RBC Foundation

Rouge National Urban Park

W.C. Wood Foundation

#### **Protectors**

(\$25,000 - \$49,999)

Canada Running Series Inc.

The Geoffrey H. Wood Foundation

Ministry of Natural Resources

Milliken Meat Products Ltd.

(\$5,000 - \$24,999)

AGF Investments Inc.

Aqueduct Foundation

Aviva Canada Inc.

Mrs. Mavis Berwick

The Estate of Anne Eberhardt

Ms. Anne Kossatz

Mr. Wilson Lee

Miller Memorial Foundation

Steinway Piano Gallery Toronto

Ms. Mara Strock

Symcor Inc.

TD Friends of the Environment

Foundation

Tippet Foundation

Toronto Field Naturalists

Toronto Zoo Rhino Zookeepers

University of Toronto

Scarborough Campus

The Estate of Elsie Eva White

The Estate of Doris Whitlock

Dr. & Mrs. Joseph K. Wong

#### **Donors**

(\$1,000 - \$4,999)

Archery District Inc

Mr. William Barnett

& Mrs. Karen Barnett

Ms. Chanel Beckenlehner

Cavelti Family Foundation

Ms. Julia Colangelo

Conam Charitable Foundation

Mr. Duane Conwell

CUPE Local 1600

Ms. Rupendra Dhillon

Mr. and Mrs. Gary Fitzgibbon

Mr. and Mrs. Paul Frazer

Mr. Gareth Frost

& Mrs. Genevieve Blanchet-Frost

Mrs. Maria Gibson

Mr. Mitchell Glickman

Ms. Phyllis Gordon

Ms. Alexandria Gross

& Ms. Debra Feist

Ms. Sue & Mr. Doug Gunton

Mrs. Gladys Humphrey

Ingredient Canada Inc.

Ms. Tammy Klein

Mrs. Patricia Koval

Mr. and Mrs. Mazen Kurdi

L. V. Lomas Ltd

Mr. D. Ledingham

& Mrs. S. Ledingham

Mrs. Esther Lee & Mr. Allan Lee

Marcogliese Family Foundation

Mr. James McConnell

Mrs. Lori McCullough

Ms. Katherine McGuire

Dr. K. Mehren & Mr. P. Mehren

Ms. Johanna Mugford

Ontario Power Generation

D. M. Parr

Mr. Charles Pisano

Mr. Benjamin Potvin

Mr. Max Power

Powis Family Foundation

The Estate of Vera F. Proctor

Ms. Purvi Rajani

Raymond James Canada Foundation

Mrs. Ramona Savoy

SCI Interiors Ltd.

Mr. Chris Sharp & Ms. Krysta Souliere

Ms. Alanna Sklar

Ms. Joanne Smith

The Hospital for Sick Children

The Marjorie & Joseph Wright

Memorial Foundation

Tony & Caley Taylor Family Fund

Toronto Zoo Adopt-a-Pond Fundraisers

Toronto Zoo Cheetah Zookeepers

Toronto Zoo Friday Volunteers

Toronto Zoo Madagascar

Fish Zookeepers

Toronto Zoo Orangutan Zookeepers

Toronto Zoo Penguin Zookeepers

Toronto Zoo Red Panda Zookeepers

Dr. & Mrs. William Waters

William & Vera G. Tucker

Memorial Fund

Ms. V. Lorraine Williams

Ms. Margaret Willis

Ms. C. M. Wilson

Mr. Derek Wires & Ms. Faiza Aziz

Ms. Rhonda Wolfond

Mr. W. Wray & Mrs. K. Wray

#### **GIANT PANDA EXPERIENCE**

##### **Major Partners**

FedEx

Mandarin Restaurants

Government of Ontario

##### **Supporters**

Chinese Cultural Centre

of Greater Toronto

Coca-Cola

Pelco by Schneider Electric

Security Technology Services Inc

##### **Media Partner**

Toronto Star

#### **TORONTO ZOO**

##### **Sponsors and Partners**

Delta Toronto East

Nestle

Pizza Pizza

Symcor

Telus

##### **Media**

##### **Partner**

CTV



# goal 5

## Enhance the governance structure

In October 2013, Toronto City Council considered a report regarding the future governance structure of the Toronto Zoo. Council recommended that the Toronto Zoo remain as a City board and made several recommendations to strengthen the governance structure. The need for a Strategic Plan and a Master Plan was emphasized in the report and Council endorsed these recommendations, recognizing the importance of having a “roadmap” for moving forward. The new Strategic Plan was adopted by the Zoo’s Board of Directors in November, 2014.

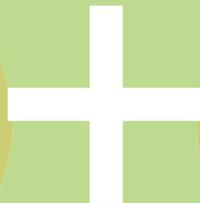
In today’s zoos, there is more emphasis on earned revenues, wildlife conservation and scientific research than in the past. The Toronto Zoo’s leadership role in these areas puts it at the forefront of the world’s zoos. Over the years, many Operating and Capital projects have been undertaken to improve the Zoo’s facilities, exhibits and infrastructure. Continuous upgrades and modifications are required, however. A complete review of the site, facilities, exhibits, equipment and infrastructure is currently underway to assist with preparation of the new Master Plan. As well, the direction of the Zoo and its mission and vision, goals and objectives as set out in the 2015-2020 Strategic Plan have to be considered in prioritizing work of the Master Plan and allocating resources for such work.



renewing  
the Zoo  
facilities,  
exhibits &  
infrastructure



STRATEGIC  
PLAN



MASTER  
PLAN



SUSTAINABLE  
FUTURE

# goal 6

Create an organizational culture that attracts, engages and retains highly motivated staff and volunteers

## people make things happen at the Zoo

Our dedicated team of staff and volunteers just keeps getting better. Commitment to saving species, helping our planet and appreciating wildlife inspires everyone at the Zoo to make our workplace the best it can be. Working at the Zoo is much more than just a job – it's an opportunity to make the world a better place. No wonder we attract such great volunteers and staff!

# 419

Zoo volunteers made visitor experiences memorable

# \$852,720

value of our volunteer contributions

# 30,963

hours were contributed by our volunteers

# 15

number of full-time staff that would need to be hired to replace our volunteers



# goal 6

## Create an organizational culture that attracts, engages and retains highly motivated staff and volunteers



### research articles published by the Toronto Zoo in 2015

One of the most important activities at the Zoo is not on display – it’s the cutting edge research conducted by Zoo staff. Since its inception, the Zoo has added invaluable information to the world pool of veterinarian and environmental knowledge, and 2015 saw an impressive list of research results published by Zoo staff.

#### ecology/field conservation/reintroduction

S. Williams, D. Powley and W.A. Rapley  
*Toronto Zoo Conservation and Education Programs Report 2014-2015*. August 2015.

#### veterinary medicine/physiology

R.H. Pimm, C.J. Dutton, S. O’Handley, G.F. Mastromonaco  
Assessment of the reproductive status of female veiled chameleons (*Chamaeleo calyptratus*) using hormonal, behavioural and physical traits.  
*Zoo Biology*, 2015 Jan-Feb; 34(1):20-32.

V. LePage, J. Young, C.J. Dutton, G. Crawshaw, J.A. Paré, M. Kummrow, D.J. McLelland, P. Huber, K. Young, S. Russell, L. Al-Hussinee, J.S. Lumsden  
Diseases of captive yellow seahorse *Hippocampus kuda Bleeker*, pot-bellied seahorse *Hippocampus abdominalis Lesson* and weedy seadragon *Phyllopteryx taeniolatus (Lacépède)*.  
*Journal of Fish Diseases*, 2015 May; 38(5):439-50.

E.J. Parmley, D.L. Pearl, N.A. Vogt, S. Yates, G.D. Campbell, J. Steiner, T.L. Imlay, S. Hollamby, K. Tuininga, I.K. Barker.  
Factors influencing mortality in a captive breeding population of Loggerhead Shrike, Eastern subspecies (*Lanius ludovicianus ssp.*) in Canada.  
*BMC Veterinary Research*, 2015 Jun 9; 11:129.

A.M.W. Nielsen, D.A. Smith, P. Delnatte, A. Pastor, C.J. Dutton  
Comparison of diagnostic methods for identifying feline coronavirus in a captive population of cheetah (*Acinonyx jubatus*) affected by feline infectious peritonitis.  
*2015 Proceedings Annual Conference AAZV*; 129.

A.R. Pastor, I.M. Stasiak, A.M.W. Nielsen, P.G. Delnatte, D.A. Smith  
Hepatic to pulmonary embolism of absorbable gelatin hemostatic sponge in two Egyptian fruit bats (*Rousettus aegyptiacus*): a complication of its use in hepatic biopsy procedures.  
*Proceedings Annual Conference AAZV*; 137.

#### reproductive physiology/technology

R.H. Pimm, C.J. Dutton, S. O’Handley, G.F. Mastromonaco  
2015. Assessment of the reproductive status of female veiled chameleons (*Chamaeleo calyptratus*) using hormonal, behavioural, and physical traits.  
*Zoo Biology*, 34, 20-32.

S. Baqir, N. Al-Zeheimi, A.B. Orabah, Y. Al-Shakaili, K. Al-Rasbi, C.J. Gartley, G.F. Mastromonaco  
Semen evaluation in an aged critically endangered captive Arabian leopard (*Panthera pardus nimr*): a case study.  
*Revue de Medecine Veterinaire (2015)* 166:244-252.

A.I. Schulte-Hostedde, G.F. Mastromonaco  
Integrating evolution in the management of captive zoo populations.  
*Evolutionary Applications (2015)* 8:413-422.

G.F. Mastromonaco, V.I. Cantarelli, M.G. Galeano, N.S. Bourguignon, C. Gilman, M. Ponzio  
Non-invasive endocrine monitoring of ovarian and adrenal activity in chinchilla (*Chinchilla lanigera*) females during pregnancy, parturition and early post-partum period.  
*General and Comparative Endocrinology (2015)* 213:81-89.

L.A. Gonzales Grajales, L.A. Favetta, W.A. King, G.F. Mastromonaco  
Assessment of developmental competence of bison embryos produced by interspecies somatic cell nuclear transfer at the 8-16 cell stage.  
*Reproduction, Fertility and Development (2015)* doi:10.1071/RD14376.

Y.N. Majchrzak, G.F. Mastromonaco, W. Korver, G. Burness  
Use of salivary cortisol to evaluate the influence of rides in dromedary camels.  
*General and Comparative Endocrinology (2015)* 211:123-130.

### status of live populations as of December 31, 2013 (not including domestic species)

	Mammals	Birds	Reptiles	Amphibians	Fish	Inverts	TOTAL
orders	9	19	4	2	18	33	85
families	36	44	20	11	47	56	214
species	86	96	63	25	105	101	476
specimens	578	321	374	210	113	150	1746
# in groups	0	0	33	358	3417	951	4759
<b>grand total</b>	<b>578</b>	<b>321</b>	<b>407</b>	<b>568</b>	<b>3530</b>	<b>1101</b>	<b>6505</b>

# goal 7

## Increase awareness, understanding and support of the Zoo as a centre for conservation excellence

### generating maximum exposure for the Zoo

Communicating with the public has changed drastically in the past few years and the Zoo has worked hard to develop a global audience. Our newly relaunched member magazine, Wild For Life, is designed to showcase the Zoo's work in saving species and keep members up to date on how their Zoo is making a difference. Practical communication with members now takes place via eblasts that keep our members in the loop on the latest programs, events and opportunities.

Social media has exploded and the Zoo is taking full advantage of this with platforms such as Twitter, Facebook and YouTube. Our new Zoo baby videos regularly go viral and are positioning the Zoo as a conservation leader to a global audience.



Twitter impressions (in 3 months)

**2,190,444+**

Facebook impressions delivered in 2015

**54,209,571**

YouTube impressions

**2,595,756**

with 20 million associated views  
of our videos on other YouTube stations

total impressions

**58,995,771**

# goal 7

## Increase awareness, understanding and support of the Zoo as a centre for conservation excellence

### Research projects supported by the Toronto Zoo in 2015

#### Toronto Zoo

Blanding's Turtle Head Starting & Reintroduction  
Wood Turtle Head Starting  
Population Investigations for the Endangered Blanchard's Cricket Frog  
New tools for Amphibian Monitoring: Establishing Environmental DNA (eDNA) as a Means of Monitoring Amphibians in Ontario  
Atlantic Salmon Re-introduction Program  
Eastern Loggerhead Shrike Captive Breeding Program  
Investigation of Key Physiological Measurement to Evaluate Loggerhead Shrike Success in Captivity  
Non-surgical Artificial Insemination in the Cheetah  
Cytogenic Evaluation of Captive and Free-Range Non-Domestic Animals  
Hormonal Evaluation of Reproductive and Adrenal Function  
Turtles Species at Risk Head-Starting Program  
Urban Turtle Initiative – Management of Turtle Populations in Rouge Park  
Response to Global Amphibian Declines  
Response to Asian Turtle Crisis and the Bushmeat Trade  
Management, Outreach, Husbandry, Research and Reintroduction Program for the Puerto Rican Crested Toad  
Milk Snake Population Monitoring in Rouge Park  
Massasauga Rattlesnake Management, Outreach, Research and Husbandry Program

Madagascar Freshwater Fishes Breeding  
Behavioural Assessment of Giant Pandas  
Investigating enteric coccidiosis in the endangered black-footed ferret (*Mustela nigripes*)  
Anesthesia of Puerto Rican Crested Toads (*Peltophryne* [Bufo] lemur) by Intracoelomic Administration of Alfaxan (alfaxalone)  
An Investigation into the Efficacy of Two Types of Commercial Feeder Crickets (*Acheta domestica*) and Two Gut-loading Diets in Growing Puerto Rico Crested Toads (*Bufo lemur*)  
Lowland Gorillas in Human Care – Browse Project  
Habitat Use and Nesting Patterns of Turtles in Rouge Park and along the Highway 24 Corridor  
DNA Barcoding the Animals of the Toronto Zoo

#### Canada Ontario

Investigating the Diet Composition of a Threatened Ontario Songbird, the Barn Swallow  
Canadian National Parks Malaise Program  
Culture of Freshwater Mussels  
Factors Influencing Mortality in a Captive Breeding Population of Loggerhead Shrike, Eastern Subspecies (*Lanius ludovicianus* ssp.) in Canada  
Captive Studies to Improve Diet Estimates and Bioenergetics  
Modeling of Polar Bears in the Wild

The Effect of Different Temperatures on the Basking Behaviour of Oregon Spotted Frogs  
Developing Assisted Reproduction Techniques for the Vancouver Island Marmots  
Investigating the Relationship Between Ambient Conditions and Thermoregulatory Responses in Polar Bears  
Multi-scale Patterns of Habitat Use, Spatial Ecology and Connectivity for Milksnakes Across a Fragmented Region  
De Novo Genome and Transcriptome Sequencing of the Canadian Beaver  
**Alberta**  
Assisted Reproductive Technologies as a Method of Embryo Production in the Wood Bison

#### United States

Long-term Monitoring of an Eastern Massasauga Rattlesnake Population in Southwest Michigan

#### International

Axolotl and Lake Xochimilco, Mexico, Creating Sanctuaries and Habitat Restoration  
Amphibian Rescue Centre Husbandry and Reintroduction Program for the Wyoming Toad  
Assessing Welfare of Zoo-Housed Cheetahs Under Different Management Strategies



# goal 7

Increase awareness, understanding and support of the Zoo as a centre for conservation excellence

## Projects supported by the Endangered Species Reserve Fund in 2015

### Canada

#### Toronto Zoo & Ontario

Freshwater Mussels  
Wetland Assessment and Restoration for Species at Risk  
Polar Bear Biodiversity Studies  
Great Lakes Program  
Recovery of SAR Blanding's Turtles and Wood Turtles  
Eastern Loggerhead Shrike Recovery Program  
Little Brown Myotis assurance colony planning  
Sponsoring Funds for NSERC Industrial Postgraduate Scholarship – Avian Conservation

#### Saskatchewan

BFF Canadian Reintroduction – Post release Monitoring

### Mexico

Beaded Lizard Community-based Conservation

### Africa international East Africa

Aqua-Links  
South Africa  
African penguins

### Madagascar

Toronto Zoo Conservation in Action: In situ Madagascar  
Madagascar Community-based  
Radiated Tortoise Conservation

### China

Snow leopard in situ Conservation

### Southeast Asia

Project Punde Kundo (Red Panda)  
Conservation of False Gharial in Indonesia  
Hutan Reforestation Efforts in Kinabatangan  
Sumatran Tiger Conservation  
South East Asian Turtle Conservation  
Forest Restoration – Besitang, North Sumatra

### Papua New Guinea

Tree Kangaroo and Biodiversity Conservation



# Statement of Operations and Net Assets

## BOARD OF MANAGEMENT OF THE TORONTO ZOO

Year ended December 31



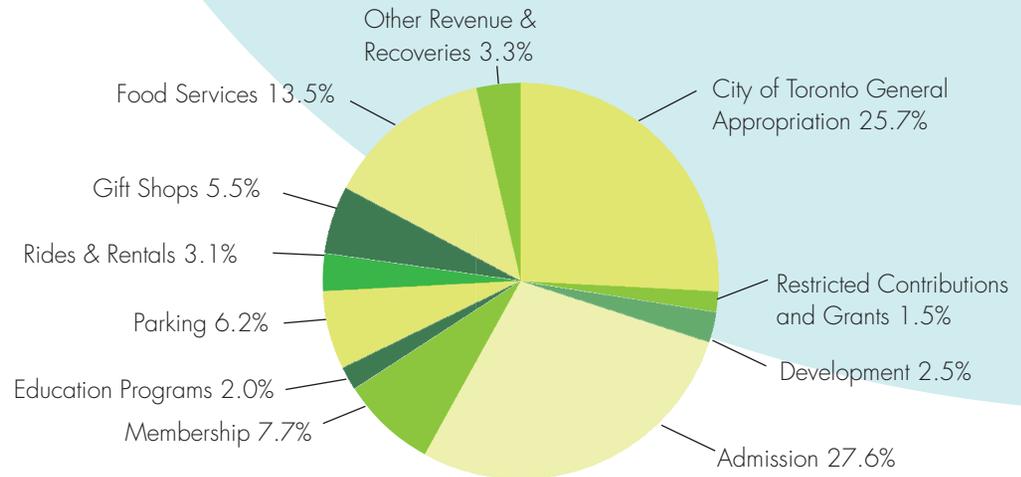
	2015	2014
	\$	\$
<b>REVENUE</b>		
Funding from City of Toronto		
General appropriation	<b>11,739,065</b>	11,443,387
Capital works contributions	<b>171,000</b>	167,600
Restricted contributions and grants	<b>716,556</b>	705,640
Admission	<b>12,632,833</b>	13,279,812
Membership	<b>3,534,938</b>	3,838,611
Food services	<b>6,184,245</b>	6,067,464
Gift shop operations	<b>2,537,174</b>	2,804,836
Parking	<b>3,419,284</b>	2,954,719
Rides and rentals	<b>1,396,708</b>	1,065,901
Education programs	<b>919,313</b>	936,970
Other revenue and recoveries	<b>1,344,201</b>	1,472,003
Development	<b>1,137,845</b>	3,227,062
Interest	<b>612</b>	6,604
	<b>45,733,774</b>	47,970,609
<b>EXPENSES</b>		
Operations & Administration	<b>17,641,056</b>	18,056,219
Conservation, Education & Research	<b>14,556,975</b>	14,699,140
Marketing & Communications	<b>2,794,575</b>	2,876,246
Food services	<b>4,935,110</b>	4,789,269
Gift shop operations	<b>2,015,217</b>	2,199,889
General management	<b>3,236,628</b>	3,034,537
Development	<b>777,143</b>	834,267
Amortization of capital assets	<b>632,468</b>	610,976
Post-employment benefits	<b>227,151</b>	218,128
	<b>46,816,323</b>	47,318,671
<b>Excess of revenue over expenses before the following</b>	<b>(1,082,549)</b>	651,938
Transfer to Toronto Community Foundation		(1,945,000)
Additional transfer (to) from Zoo		
Stabilization Reserve	<b>1,103,269</b>	904,486
Transfer (to) from City of Toronto	<b>227,151</b>	218,128
<b>Excess of revenue over expenses for the year</b>	<b>247,871</b>	(170,448)
Net assets, beginning of year	<b>2,364,390</b>	3,050,816
<b>Net assets, end of year</b>	<b>2,612,261</b>	2,364,390

Note: The required information has been submitted in accordance with the Public Sector Salary Disclosure Act, 1996.  
\*Funding from deferred revenue is raised primarily through Development Division activities.

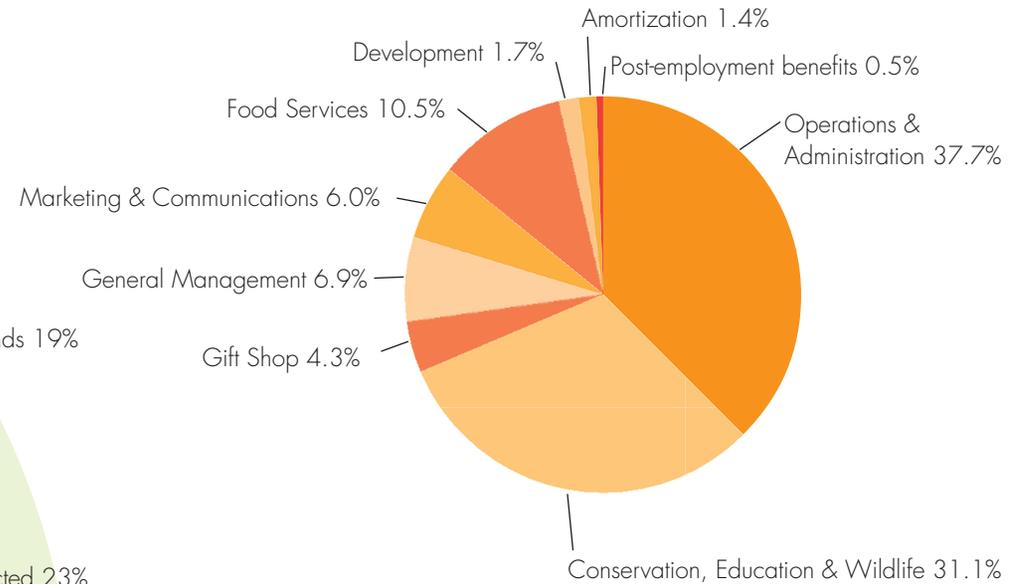


# financials

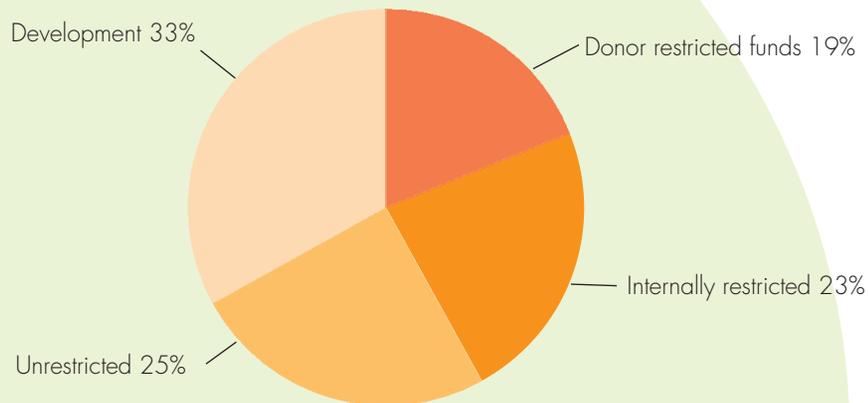
## Zoo Revenue 2015



## Zoo Expenses 2015



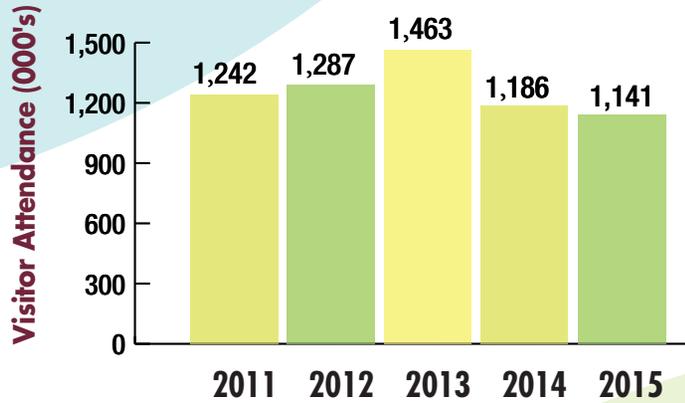
## Market Value Assets as at December 31, 2015 \$13.8 million



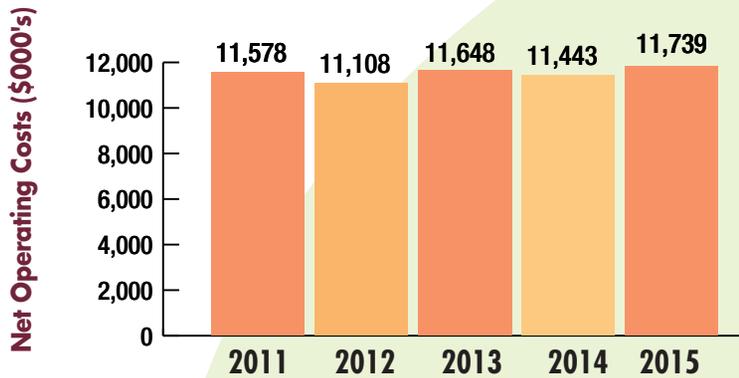
# financials



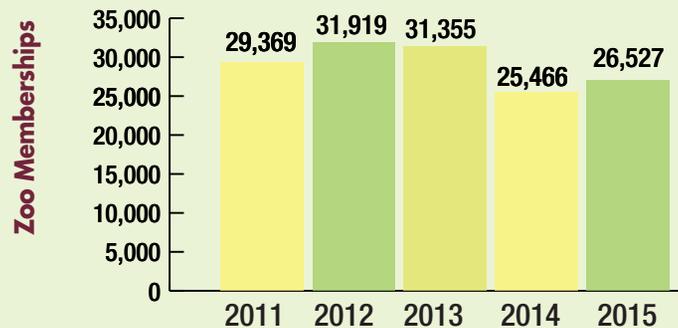
**Zoo Visitor Attendance 2011-2015**



**Net Operating Costs to City of Toronto 2011-2015**  
(Excluding Capital Financing)



**Zoo Memberships 2011-2015**





# who's who at the Zoo

## **Chair**

Mr. Joe Torzsok

## **Vice Chair**

Councillor Gloria Lindsay Luby

## **Board Members**

Dr. Cal Bricker  
Dr. Ming-Tat Cheung  
Councillor Raymond Cho  
Councillor Glenn De Baeremaeker  
Mr. Paul Doyle  
Ms. Sabrina Fiorellino  
Mr. Michael Ho  
Councillor Giorgio Mammoliti  
Mr. Joshua Vinegar  
Ms. Cindy Yelle

## **Toronto Zoo Senior Staff**

### **Chief Executive Officer**

Mr. John Tracogna

### **Chief Operating Officer**

Mr. Robin Hale

### **Executive Director,**

Conservation, Education & Wildlife  
Dr. William Rapley, D.V.M., M.Sc.

### **Senior Director, Marketing, Communications & Partnerships**

Ms. Jennifer Tracey

### **Director, Corporate Planning**

Ms. Susan Gunton

### **Director, Facilities & Services**

Mr. Tom Quan

### **Director, Wildlife Care**

Dr. David Barney, B.Sc., M.Sc., Ph.D.

### **Senior Veterinarian**

Christopher J. Dutton, B.Sc., B.V.Sc.,  
M.Sc., Dipl. A.C.Z.M., Dipl. E.C.Z.M.

### **Business Development Officer**

Mr. Peter Simpson

### **Campaign Director**

Mr. Darryl Swain

### **Senior Development Officer**

Ms. Marion Zimmer

### **Curator, Amphibians & Reptiles**

Mr. Bob Johnson, M.Sc.

### **Curator, Birds & Invertebrates**

Dr. Kevin Kerr, Ph.D.

### **Curator, Fishes**

Ms. Cindy Lee, B.Sc.

### **Curator, Mammals**

Ms. Maria Franke, M.Sc.

### **Curator, Reproductive Programs**

Dr. Gabriela Mastro Monaco, M.Sc.,  
Ph.D.

### **Nutritionist – Animal Nutrition**

Mr. Jaap Wensvoort, B.Sc., M.Sc.

### **Manager, Education**

Ms. Heather House, B.A., B.Ed.

### **Manager, Wildlife Care**

Mr. Eric Cole

### **Manager, Computer & Telecom Services**

Mr. Charles Duncan

### **Manager, Financial Services**

Mr. Paul Whittam

### **Manager, Horticulture & Grounds**

Ms. Anna-Marie Burrows

### **Manager, Human Resources**

Ms. Shawna Findlay-Thompson, CHRP

### **Manager, Marketing**

Ms. Kimberly Haider

### **Manager, Member & Guest Services**

Mr. Rey deGuzman

### **Manager, Special Events & Community Relations**

Ms. Cynthia Shipley

### **Manager, Retail & Rides**

Mr. Andre Wattie

### **Manager, Safety & Security**

Mr. Shane Alexander