

AGENDA

Potter Park Zoo Advisory Board
1301 S. Pennsylvania Avenue ~ Lansing, MI 48912
Telephone: 517.342.2776; Fax: 517.316.3894

The Board information packet is available on-line by going to www.potterparkzoo.org, selecting "About," clicking on "Zoo Board Meetings" and clicking "February 09, 2022".

POTTER PARK ZOO ADVISORY BOARD MEETING

**Wednesday, February 09, 2022
6:00 PM**

- 1. Call to Order**
- 2. Approval of the December 08, 2021 Meeting Minutes.**
- 3. Limited Public Comment** – *Limited to 3 minutes with no discussion*
- 4. Late Items/Deletions/Consent Items**
- 5. Director's Report**
 - a. Finance Report – Cynthia Wagner
 - b. Admission Report- Cynthia Wagner
 - c. Director's Report – Cynthia Wagner
- 6. New Business**
 - a. Board Elections
 - b. Resolution – Agreement with Trane
 - c. Resolution- Radio Donation to the City of Lansing
 - d. Veterinary Fellowship Discussion – Cynthia Wagner
 - e. AZA Director's Policy Conference
- 7. Old Business**
 - a. Strategy Subcommittee – Mary Leys
 - b. External Relations Subcommittee – Cheryl Bergman
 - c. AZA Accreditation Standards – Cynthia Wagner
- 8. Board Comments**
- 9. Limited Public Comment** - *Limited to 3 minutes with no discussion*
- 10. Upcoming Meeting**
 - a. Zoo Advisory Board Meeting **March 09, 2022 at 6:00 PM**
- 11. Adjournment**

Official minutes are stored and available for inspection at the address noted at the top of this agenda. Potter Park Zoo will provide necessary reasonable auxiliary aids and services, such as interpreters for the hearing impaired and audio tapes of printed materials being considered at the meeting for the visually impaired, for individuals with disabilities at the meeting upon five (5) working days' notice to the Zoo. Individuals with disabilities requiring auxiliary aids or services should contact the Zoo by writing to: Zoo Director, 1301 S. Pennsylvania Ave., Lansing, MI 48912, or by calling 517.342.2776.

MINUTES – INGHAM COUNTY
POTTER PARK ZOO ADVISORY BOARD
1301 S. Pennsylvania Avenue,
Lansing, MI, December 08, 2021

BOARD MEMBERS

PRESENT: Chair John Groen, Commissioner Trubac, Cheryl Bergman, Vice Chair Kyle Binkley, Julie Pingston, Molly Korn, Dr. Richard Snider, and Mary Leys

ALSO PRESENT: Cynthia Wagner, Zoo Director, Amy L. Morris-Hall, Zoological Society Executive Director, and Commissioner Pena

ABSENT: Commissioner Tennis and Mary Hauser

CALL TO ORDER: Meeting called to order at 6:01 p.m.

MINUTES: Moved by Kyle Binkley and supported by Commissioner Trubac to approve the minutes of the November 10, 2021 meetings as amended, **Yes-8; No-0; MOTION CARRIED.**

LIMITED PUBLIC COMMENT

None

LATE ITEMS/DELETIONS/CONSENT ITEMS

None

FINANCIAL REPORTS

Zoo Financial Report

Director Wagner reported revenue is exceeding budget by over \$500,000 year to date. Expenses are also high as discussed previously. She stated the zoo should still end the year by adding to the fund balance even with the increased expenses.

Admission Report

Director Wagner reported paid admission was down for the month of November compared to 2020, but up from 2019. Year to date admissions was down slightly from 2019, but the difference is primarily from events/education attendees.

ZOO DIRECTOR REPORT

Major Elements Reported:

Paul Buzzard presented information to zoo staff about the Pallas cat conservation work he is participating with in Armenia. This a project the conservation fund supported financially and the zoo also provided Pallas cat and snow leopard urine to bait camera traps in Armenia to identify areas where Pallas cat may live.

Brian Fisher accepted the position of Maintenance Manager Deputy Director. Brian will be starting in his new

position sometime after the first of the year.

Animal experiences and job shadows have begun again at a scaled back level.

The next scheduled Big Zoo Lesson is for the week of February 14.

Due to the break in education programming and loss of revenue the Society has made the decision to furlough Dennis Laidler and Megan Weidman.

A Kid Again hosted an event at the zoo with 348 attendees. This is a national non-profit organization that provides services to children with life threatening injuries and their families.

Wonderland of Lights has been very successful. There were 1,539 attendees the Toys for Tots night and 846 toys were collected.

The last Zoo Nights event is December 15.

Mariah Martinez completed the training and is now a Safe Space Advocate through Ingham County.

The animal care team continues to monitor Doppsee's hormone levels to determine if she is pregnant.

The population viability analysis summary report included is the summary from the black rhino breeding and transfer plan. This is an example of the type of information presented by the Species Survival Plan annually for each species that is a managed population.

NEW BUSINESS

Resolution Honoring John Groen for His Service on the Zoo Advisory Board and as the Board's Chair

Moved by Julie Pingston, Supported by Dr. Snider to approve the Resolution as written, **Yes-8; No-0; MOTION CARRIED**

AZA Accreditation Standards

Director Wagner stated the 2022 animal care standards for accreditation are included in the packet. She stated those could be reviewed by the board and would be gone through in more detail at future meetings. At this meeting she explained the application and inspection process would be presented in detail and are as follows:

- Accreditation is every five years with the exception of this cycle which is six.
- Applications are due March 1 or September 1 and the fee is \$3,500 if already accredited and an additional deposit of \$1,500 for inspection team costs.
- Applications are submitted according to very detailed requirements.
- The inspection consists of three inspectors. They try to include at least one inspector who has been at the institution for a previous inspection.
- Inspection is one to three months from the time of the application submission.
- Prior to inspection the Chair of the team coordinates the date with Director as well as accommodations. The Director creates the schedule and coordinates times for all interviews including staff, county officials, board members, major county departments, and volunteers.
- A primary reviewer is assigned that is not part of the inspection team but is part of the accreditation commission.
- The inspection takes place over the course of two to three days.
- The inspectors present an exit report to the directors before they leave.

- The zoo starts to address the items on the inspection report between the time of the inspection and the hearing.
- The Director submits a progress report one month prior to the hearing.
- The inspection team provides a full report to the accreditation commission.
- The hearing is held at the September AZA conference hearing.
 - The zoo can take as many individuals to the hearing as they would like.
 - The accreditation commissioner will ask questions.
 - A determination will be made by the commission and presented to the zoo hearing attendees as well as a full detailed report.
 - Possible outcomes:
 - Accredited – no updates needed or updates needed
 - Not accredited – appeal or not appeal, 1 year to reapply
 - Tabled – 1 year to change things before inspected again

Dr. Snider commented that it is important for the board to understand the roles of staff at the zoo and how it affects operations.

Julie Pingston stated that it has been helpful to have staff do presentations at the board meetings to gain a better understanding of each of their roles in the operation of the zoo.

OLD BUSINESS

Strategy Subcommittee

No Updates

External Relations Subcommittee

No Updates

BOARD COMMENTS

Mary Leys thanked Chair Groen for his leadership.

Dr. Snider expressed his sincere gratitude for Chair Groen's service and dedication to the zoo. He stated that Mr. Groen had guided the zoo through some difficult times.

Dr. Snider requested an update on the fundraising for the animal health facility. Amy L. Morris-Hall reported there is approximately 1.2 million in hard and soft commitments with several meetings still being scheduled.

LIMITED PUBLIC COMMENT

None

ADJOURNMENT

Meeting ended at 6:51 p.m.

POTTER PARK ZOO
BALANCE SHEET - PRELIMINARY
December 31, 2021

ASSETS

CASH	\$ 1,253,136
DEPOSITORY CASH	77,033
IMPREST CASH	8,000
TAXES REC - CURRENT LEVY	(18,378)
TAXES REC - DELINQUENT	21,352
ESTIMATED UNCOLLECTIBLE DELINQUENT TAXES	(17,317)
IFT TAX RECEIVABLE	(15,013)
PROPERTY TAX RECEIVABLE	-
INTEREST RECEIVABLE	1,421
DUE FROM STATE	-
INVENTORY	81,930
PREPAID EXPENSES	68,544

TOTAL ASSETS	<u><u>\$ 1,460,707</u></u>
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LIABILITIES

VOUCHERS PAYABLE	
DUE TO ZOOLOGICAL SOCIETY	138,365
TAX LEVY LIABILITY	25,000
SALES TAX PAYABLE	2
REFUND NOW	(61)
REFUND APPLY	(374)
ACCRUED PAYROLL	-
ACCOUNTS PAYABLE	(10)
DEFERRED REVENUE - PROPERTY TAXES	-
DEFERRED REVENUE - DELINQUENT TAXES	10,828

TOTAL LIABILITIES	<u>173,750</u>
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FUND BALANCE

UNSPENDABLE	170,406
UNRESTRICTED FUND BALANCE	1,116,550
	<u>1,286,957</u>

TOTAL LIABILITIES AND FUND BALANCE	<u><u>\$ 1,460,707</u></u>
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POTTER PARK ZOO
YEAR TO DATE BUDGET/ACTUAL REPORT - PRELIMINARY
FOR 12 MONTHS ENDED DECEMBER 31, 2021

	2021 BUDGET	DECEMBER 2021 YTD ACTUAL	BUDGET REMAINING	% OF BUDGET	DECEMBER 2020 YTD ACTUAL
REVENUES					
PROPERTY TAX	\$ 3,262,137	\$ 3,229,457	\$ 32,680	99.00%	\$ 3,080,445
UNALLOCATED PORTION OF TAXES (0 MONTHS)	\$ -	\$ -	\$ -	0.00%	\$ -
ADMISSIONS	\$ 694,959	\$ 785,908	\$ (90,949)	113.09%	\$ 434,888
CONCESSIONS, GIFT SHOP, VENDING	\$ 694,900	\$ 797,642	\$ (102,742)	114.79%	\$ 306,194
PARKING FEES	\$ 175,000	\$ 204,624	\$ (29,624)	116.93%	\$ 92,685
INTERACTIVE SITES	\$ 164,999	\$ 131,863	\$ 33,136	79.92%	\$ 44,817
INTEREST INCOME	\$ 50,000	\$ 2,964	\$ 47,036	5.93%	\$ 19,226
OTHER REVENUES	\$ (51,605)	\$ 87,030	\$ (138,635)	-168.65%	\$ 116,531
TOTAL REVENUES	\$ 4,990,390	\$ 5,239,489	\$ (249,099)	104.99%	\$ 4,094,786
EXPENDITURES					
PERSONNEL SERVICES					
Salaries & Wages - Full Time	\$ 1,626,615	\$ 1,536,006	\$ 90,609	94.43%	\$ 1,643,766
Salaries & Wages - Seasonal	\$ 503,284	\$ 648,543	\$ (145,259)	128.86%	\$ 488,603
Benefits	\$ 894,938	\$ 877,819	\$ 17,119	98.09%	\$ 909,382
Total Personnel Services	\$ 3,024,837	\$ 3,062,369	\$ (37,532)	101.24%	\$ 3,041,752
CONTROLLABLE EXPENDITURES					
Supplies	\$ 308,000	\$ 401,647	\$ (93,647)	130.40%	\$ 222,609
Animal Care	\$ 293,000	\$ 267,536	\$ 25,464	91.31%	\$ 259,620
Purchased Services	\$ 419,078	\$ 557,839	\$ (138,761)	133.11%	\$ 419,568
Utilities - Telephone	\$ 21,125	\$ 17,248	\$ 3,877	81.65%	\$ 14,978
Rentals & Leases	\$ 2,000	\$ 3,746	\$ (1,746)	187.30%	\$ 1,230
Other Expenses	\$ 114,175	\$ 72,409	\$ 41,766	63.42%	\$ 72,030
Total Controllable Expenditures	\$ 1,157,378	\$ 1,320,425	\$ (163,047)	114.09%	\$ 990,034
NON-CONTROLLABLE EXPENDITURES					
Utilities	\$ 225,000	\$ 147,753	\$ 77,247	65.67%	\$ 236,012
Insurance	\$ 85,000	\$ 89,540	\$ (4,540)	105.34%	\$ 85,294
IT Support Expense	\$ 72,891	\$ 65,438	\$ 7,453	89.77%	\$ 83,233
Other Expenses	\$ 426	\$ 428	\$ (2)	100.55%	\$ 426
Total Non-Controllable Expenditures	\$ 383,317	\$ 303,159	\$ 80,158	79.09%	\$ 404,965
CAPITAL OUTLAY					
Capital Improvements	\$ (20,000)	\$ -	\$ (20,000)		\$ 27,709
TOTAL EXPENDITURES	\$ 4,545,532	\$ 4,685,953	\$ (140,421)	103.09%	\$ 4,464,459
TOTAL CHANGE IN FUND BALANCE	\$ 444,858	\$ 553,537			\$ (369,674)
FUND BALANCE AS OF 1/1/21					
NON-SPENDABLE		\$ 170,406			
UNRESTRICTED		\$ 562,924			
		<u>\$ 733,330</u>			
FUND BALANCE AS OF 12/31/21		\$ 1,286,957			
FUND BALANCE AS OF 12/31/21					
UNSPENDABLE		\$ 170,406			
UNRESTRICTED		\$ 1,116,551			
		<u>\$ 1,286,957</u>			

POTTER PARK ZOO
MONTHLY ATTENDANCE REPORT
FOR MONTH AND YTD ENDING December 31, 2021

ADMISSION TYPE	CURRENT MONTH						YEAR-TO-DATE			
	2019	2020	2021 Gate	2021 Online	2021 Total	BETTER (WORSE) THAN PY	2019 COUNT	2020 COUNT	2021 COUNT	BETTER (WORSE) THAN PY
GENERAL										
CHILDREN	0	474	0	0	0	(474)	20,277	13,673	0	(13,673)
CHILD RESIDENT	0	0	193	5	198	198	0	0	13,563	13,563
CHILD NON-RESIDENT	0	0	124	84	208	208	0	0	18,648	18,648
CHILDREN OFF SEASON	364	0	0	0	0	0	2,709	2,074	0	(2,074)
CHILDREN - UNDER 3	164	44	92	22	114	70	11,459	4,204	16,224	12,020
ADULT RESIDENT	0	264	655	11	666	402	21,638	15,241	24,817	9,576
ADULT NON-RESIDENT	0	174	243	156	399	225	17,473	12,021	28,799	16,778
ADULT OFF SEASON	1,214	0	0	0	0	0	6,078	3,131	0	(3,131)
ADULT ONLINE	0	1,196	0	0	0	(1,196)	0	17,815	0	(17,815)
SENIOR/MILITARY RESIDENT	0	3	6	0	6	3	2,571	1,382	2,906	1,524
SENIOR/MILITARY NON-RESIDENT	0	2	531	24	555	553	3,409	1,218	5,320	4,102
GROUPS	6	0	0	0	0	0	11,481	67	4,478	4,411
SUBTOTAL	1,748	2,157	1,844	302	2,146	(11)	97,095	70,826	114,755	43,929
MEMBERSHIPS/PROGRAMS										
PPZ MEMBERS	380	468	0	31	31	(437)	16,681	12,986	18,598	5,612
SOCIETY PROGRAMMING/EVENTS	18,268	12,698	16,318	0	16,318	3,620	53,570	21,775	39,264	17,489
RECIPROCAL ZOO MEMBERS	75	0	0	0	0	0	6,484	195	0	(195)
RECIPROCAL ZOO MEMBERS (100%)	28	0	0	0	0	0	2,669	192	0	(192)
MONDAY PROGRAM	79	362	45	3	48	(314)	8,208	2,914	3,376	462
ZIYN	0	0	72	0	72	72	0	373	2,773	2,400
OTHER (non-paying)	0	177	0	0	0	(177)	5,953	2,949	2,116	(833)
SUBTOTAL	18,830	13,705	16,435	34	16,469	2,764	93,565	41,384	66,127	24,743
ONLINE MEMBER TICKETS	0	0	0	0	0	0	0	4,300	0	(4,300)
MEMBERSHIP/PROGRAMS TOTAL	18,830	13,705	16,435	34	16,469	2,764	93,565	45,684	66,127	20,443
GRAND TOTAL	20,578	15,862	18,279	336	18,615	2,753	190,660	116,510	180,882	64,372

ADMISSION TYPE	DESCRIPTION
CHILDREN RESIDENT	Children, Ingham County ages 3-16 (\$5 April - October, \$3 November-March)
CHILDREN NON-RESIDENT	Children, Out of Ingham County ages 3-16 (\$5 April - October, \$3 November-March)
CHILDREN - UNDER 3	All Children, any county under age 3 (Free)
ADULT RESIDENT	Adult of Ingham County (\$7 April 1 - Oct. 31, \$4 November-March)
ADULT NON-RESIDENT	Adult Out of Ingham County (\$13 April 1 - Oct. 31, \$4 November-March)
SENIOR/MILITARY RESIDENT	Seniors/Military of Ingham County (\$5 April 1 - Oct. 31, \$4 November-March)
SENIOR/MILITARY NON-RESIDENT	Seniors/Military of Ingham County (\$11 April 1 - Oct. 31, \$4 November-March)
PPZ MEMBERS	Visitors holding membership at PPZ - one time payment
SPECIAL EVENTS - PPZ	Admission included in event fee
SPECIAL EVENTS - COUNTY	Admission included in event fee
RECIPROCAL ZOO MEMBERS	Reciprocal Zoo memberships (Discount varies)
RECIPROCAL ZOO MEMBERS (100%)	Reciprocal Zoo Members (Free admission)
GROUPS	20 or more guests paying together (\$1 off per person)
MONDAY PROGRAM	Ingham County and City of Lansing Residents free 9-12 PM on non-holiday Mondays
OTHER (non-paying)	Any coupon related attendee

POTTER PARK ZOO
MONTHLY ATTENDANCE REPORT
FOR MONTH AND YTD ENDING JANUARY 31, 2022

ADMISSION TYPE	2021	2022 Gate	2022 Online	2022 Total	BETTER (WORSE) THAN PY	2021 COUNT	2022 COUNT	BETTER (WORSE) THAN PY
GENERAL								
CHILD RESIDENT	143	62	1	63	(80)	143	63	(80)
CHILD NON-RESIDENT	352	92	15	107	(245)	352	107	(245)
CHILDREN - UNDER 3	131	36	4	40	(91)	131	40	(91)
ADULT RESIDENT	311	241	1	242	(69)	311	242	(69)
ADULT NON-RESIDENT	463	262	46	308	(155)	463	308	(155)
SENIOR/MILITARY RESIDENT	45	2	0	2	(43)	45	2	(43)
SENIOR/MILITARY NON-RESIDENT	394	2	2	4	(390)	394	4	(390)
GROUPS	0	0	0	0	0	0	0	0
SUBTOTAL	1,839	697	69	766	(1,073)	1,839	766	(1,073)
MEMBERSHIPS/PROGRAMS								
PPZ MEMBERS	652	413	13	426	(226)	652	426	(226)
SOCIETY PROGRAMMING/EVENTS	0	0	0	0	0	0	0	0
RECIPROCAL ZOO MEMBERS	0	0	0	0	0	0	0	0
RECIPROCAL ZOO MEMBERS (100%)	0	0	0	0	0	0	0	0
MONDAY PROGRAM	7	7	1	8	1	7	8	1
ZIYN	46	33	0	33	(13)	46	33	(13)
OTHER (non-paying)	76	0	0	0	(76)	76	0	(76)
SUBTOTAL	781	453	14	467	(314)	781	467	(314)
GRAND TOTAL	2,620	1,150	83	1,233	(1,387)	2,620	1,233	(1,387)

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MONDAY PROGRAM	Ingham County and City of Lansing Residents free 9-12 PM on non-holiday Mondays
OTHER (non-paying)	Any coupon related attendee



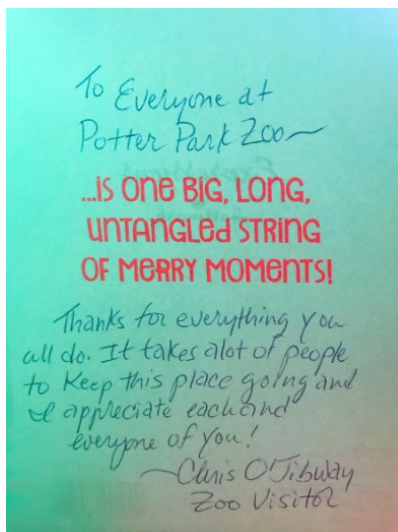
Director's Report February 09, 2022



Potter Park Zoo is the homepage feature on the Greater Lansing Convention and Visitor's Bureau website highlighting sensory friendly activities!

The GLCVB partnered with WLNS and the Xavier DeGroat Foundation to promote sensory friendly programming including Potter Park Zoo's efforts.

Right: The new Potter Park Zoo map is now live on the website. Unlike the previous version, this new map is in an easily editable format and can be updated regularly as changes occur.



Left: A great message of appreciation from one of our guests!

Staff

Brian Fisher started January 3, 2022 in the position of Maintenance Manager Deputy Director. Tom Davidek is retiring February 25, 2022.

January 9, 2022 was Zookeeper Heather's last day. Heather Evans worked at PPZ for 15 years. There is one candidate currently going through the hiring process with a potential start date of February 28, 2022. We are continuing interviews to fill a second vacant keeper position.

The maintenance reorganization is complete and the new position is posted. We are hiring for two Zoo Maintenance Worker I/II/III positions.

We will be advertising for summer seasonal positions soon for the guest services, maintenance, and animal care departments.

Public Safety – Rick Parker:

- Staff injury reports: 42 in 2021, 48 in 2020 and 61 in 2019.
- Public Safety dispatch received 9,838 phone calls while at the front desk in 2021.
- Public safety has scaled back the day ranger hours through March.
- Seven AZA drills were completed in 2021 during the day shift and several more phone drills were done with the evening and overnight ranger shifts.
- A venomous bite table top drill was conducted February 8, 2022. We will continue live drills in 2022, but will also be incorporating many more table top drills for various emergency situations.

Customer Services – Jon Lawrence, Customer Services Manager

Below are some 2021 highlights from customer services at Potter Park Zoo along with some current projects underway.

- Overall a very good year with revenue exceeding budget expectations. Review of expenditures against revenue is ongoing as costs continue to rise due to supply chain, manufacturing costs, and general inflation.
- The Gift Shop and Admission clerks again asked guests to consider making a \$1 conservation donation and raised \$5,940.00 in donations during 2021. Guests were thanked with one of four commemorative 2021 keepsake bookmarks. The five 2022 bookmarks are printed and available now.
- Conservation Partner (*AAZK, Action for Cheetah's, Red Panda Network, etc.*) merchandise accounted for \$5,898.46 in gift shop sales with \$2,899.70 in AAZK sales of consignment animal artwork going directly to our own AAZK chapter for their educational and conservation efforts.
- Additional donations made at the admission booths or in the gift shop specific to an opportunity to give a little extra to offset the impact of pandemic closures brought in \$897.60 in 2021.
- As county employees, concession and retail employees are not permitted to accept tips. When offered a tip this is explained and guests will often choose to still recognize the good service interaction by making a donation to the zoos conservation efforts. In 2021 our food & retail employees were responsible for \$1,599.96 in "Tips for Conservation".
- The Savanna Grill distributed 944 paper straws at a quarter a piece in the "Straws for Conservation" effort which looks to educate guests on the importance of skipping the straw all together, utilizing environmentally friendly straws or reusable straw options. This brought in an additional \$248.50 in conservation donations.
- Annual deep clean of the Savanna Grill and the food service kiosks and equipment is underway and should be completed in the month of February.
- Annual inventory in AniMall gift shop is completed and submitted to Financial Services.

Events



Wonderland of Lights Attendees Total: 17,270



The final 2021 Zoo Nights event was held December 15, 2021 with 568 attendees.



Ice Safari returns February 12, 13, 19, and 20, 2022 after its successful debut in 2021.

Volunteer Program

In 2021, our volunteer program was able to bring back more volunteer opportunities as some of the COVID-19 restrictions eased. In lieu of in person volunteer meetings/gatherings, we continued to engage existing and new volunteers through our monthly volunteer zoom sessions. These have proven to be well received and useful in maintaining our relationship with all of our volunteers, some of which have been unable to return yet in person. 2021 also brought back many more groups (compared to 2020) to help us with grounds clean-up and beatification, as well as multiple events. Group volunteers especially helped make major events like Fall Zootacular possible and successful. We look forward to recruiting additional individual and group volunteers in 2022. Also, we will be revamping our hours incentive program to help encourage even more engagement and commitment.

Breakdown of 2021 Individual Volunteers, Animal Care Interns, Education Interns, Event Interns and Zoo Teen numbers & hours:

2021 Individual Hours:

168 Individuals
6,080.33 Hours

2021 Animal Care Interns:

15 Interns
5,520 Hours

2021 Education Interns:

10 Interns
2,533.66 Hours

2021 Event Interns:

2 Interns
689.71 Hours

2021 Zoo Teen Volunteers:

15 Teens
552.65 Hours

Total Individual Logged Hours: 15,376.35 Hours

Total Individuals with Hours: 210 Volunteers

2021 Group Volunteer Totals:

Hours: 1,054.01 Hours

Number of Group Volunteers: 379 Volunteers

We are accepting group volunteers for this spring!

Membership Program

Our membership program grew slowly, but steadily in 2021, as our community continued to see the value of a Covid-safe, fun and educational activity for families and individuals alike. Below is an average number comparison of 2020 and 2021. Please note the individual members total does not include children in the household.

Throughout 2020, there were 6,424 members on average and 3,089 average member households. In 2021, we had an average of 6,766 members and 3,163 member households.

Education – Jennifer Horvatin

Due to COVID and other factors, live animal encounter presentations and outreaches were suspended in 2020 and discontinued in 2021.

To continue the educational work of the zoo, a new series of conservation education stations were developed and implemented in spring/summer of 2021.

- * Five featured animals (eagle, otter, red panda, rhino, penguin)
- * Education interns developed additional stations for their projects
- * 62 volunteers donated 970 hours presenting stations
- * 36,631 guest contacts with an education station in 2021

Zookambi operated at 60% capacity in 2021 due to COVID safety protocols and distancing. We filled every available spot.

- * Currently working on camp licensing through State of Michigan
- * Finalizing 2022 schedule
- * Goal is to have website updated and registration live mid-February

BIG Zoo Lesson came back for the 2020-2021 school year. With many schools still not allowing field trips, we have fewer classes than in previous years. The next classes are scheduled for mid-February.

Zoo in Your Neighborhood and FALCONERS were on hiatus while Mariah Martinez was on maternity leave. The next FALCONERS event is February 26. It will be a drive through dinner in partnership with Outback Steakhouse.

We are working on a revised interpretive training plan for conservation education station volunteers, guided tours, and BIG Zoo Lesson programming.

The Education Curator position has been changed to Conservation Engagement and Learning Lead. The position is posted and Amy Morris has started interviews.

Animals

- Doppsee is not believed to be pregnant at this time. Dr. Ronan is working with Dr. Monica Stoops to participate in a research study regarding synchronization of female black rhino estrus cycles.
- The cotton top tamarins gave birth to two healthy babies on January 2.
- Staff are working on bongo reproductive surveys. Some initial findings include:
 - Male has limited fertility
 - Older female is no longer cycling
 - Younger female has erratic cycles
- The two red panda cubs continue to grow and can be seen more frequently on exhibit.
- Ring tailed lemur intros are going well and we have observed the male breeding with both females.
- The tegu is on exhibit in the Reptile building.
- Year-end reports and renewal applications have been submitted to the Michigan DNR for our Threatened/Endangered Species permit and our Scientific Collectors permit.
- We are preparing for otter pups to be born. While we can't completely confirm pregnancy, she is showing signs that she is preparing to give birth in the coming weeks.
- Tala the female wolf has more cancer and we are assessing how treatable it is. Tala is a geriatric wolf who was treated for cancer in 2020/2021.
- Animal care staff were fit tested for N95 masks to improve COVID safety measures when working with the tiger, lions, and snow leopard.
- The armadillo that was used for education programming died recently. Cause of death has not been determined, but is likely age related as he was geriatric.
- Animal care staff are planning to transition the wings of wonder exhibit into an exhibit for the Trumpeter hornbill and the African crested porcupine.



2021 Zoo Veterinary Highlights

The zoo veterinary department 50 yearlong collaboration with Michigan State College of Veterinary College was honored with prestigious Distinguished Partnership Award for Community-Engaged Research.

Dr. Ronan is an adjunct professor at MSU CVM-running multiple final year veterinary student rotations, guest lecturing, acting as an advisor for the Zoo, Wildlife, Exotic and Aquatic student veterinary club, and mentoring summer research students. This ongoing collaboration between PPZ and MSU CVM, numerous students, interns, and residents have collaborated on zoo medicine studies that resulted in scientific publications. With each publication describing a novel condition, the medicine and care provided for these endangered species is improved and the sustainability of these captive zoo populations is strengthened.

Despite the ongoing pandemic, the zoo veterinary and animal care staff participated in multiple studies:

- Samples were submitted from the zoos Wood turtles, spotted turtles, and Blanding turtles for a multi-institution study led by the Center for Wildlife Studies on “*Forensic Application of Stable Isotopes and Trace Elements in Determining Turtle Origin.*” This study may help mitigate illegal wildlife trafficking of turtles.

- Samples were submitted for multiple studies working to determine the genetics of current AZA animal populations. Knowledge of the genetics of the current SSP population is critical to efforts to keep these population sustainable:

- “*A Genetic Analyses of US Captive Tigers,*” an AZA’s Tiger Species Survival Plan (SSP) study led by researchers at Louisiana State University.
- “*Genomic analysis of the managed Eastern black rhinoceros (Diceros bicornis michaeli) population in AZA institutions.*” a Rhino SSP endorsed study led by George Mason University and Smithsonian Conservation Biology Institute
- “*Genomic analysis of the Eastern mountain bongo,*” a SSP approved study lead by Smithsonian Conservation Biology Institute

- Blood was submitted from one of our Amur tigers for an AZA’s Tiger Species Survival Plan (SSP) endorsed study on blood types in exotic Felids at U of F Veterinary School. This study will help make emergency blood transfusions safer in exotic felids.

- Testicles from Sivaki, our male tiger who was euthanized were sent to Omaha’s Henry Doorly Zoo and Aquarium Reproductive Science department and 7.8 million sperm were recovered and frozen for future use in artificial insemination studies in tigers

-Medical records were submitted for an ongoing morbidity and mortality review on neonatal tigers, led by AZA's Tiger Species Survival Plan (SSP), North Carolina State University's College of Veterinary Medicine.

-Medical records were submitted for an ongoing case series on dilated cardiac myopathy in meerkats, led by Dr. Kadie Anderson at Point Defiance Zoo and Aquarium and Disney Animal Health. Heart disease is a poorly characterized disease in this population and this study will help with the diagnosis and management of future cases.

Dr. Ronan was a co-author in multiple publications:

Eustace, R., Agnew, D., Fitzgerald, S., Fyfe, J., Duncan, A., Petroff, B, Thompson, K.
"Presumptive Congenital hypothyroidism in Red Pandas (*Ailurus fulgens fulgens*) from four successive litters," Journal of Zoo and Wildlife Medicine, 52(2), 795-805, (11 June 2021)

Thompson KA, **Eustace R**, Mavangira V, Turner C, Monahan CF. Left displacement of the abomasum in a reticulated giraffe bull in managed care. J Vet Diagn Invest. 2021 Sep;33(5):1023-1027.

Walker, B., **Eustace, R.**, Junge, R., Hsu, T.C, Watson, V. Soft tissue sarcoma in two zoo-housed Alaskan moose (*Alces alces*). Submitted to J Vet Diagn Invest-accepted for publication, pending final review.

Current ongoing studies at PPZ include:

-A study on the Cardiac Disease in Giant Tortoise. This study to be submitted for publication in Journal of Zoo and Wildlife Medicine in next 30 days.

-A study on intervertebral disk disease in large felids. Paper will be submitted to Frontiers in Veterinary Medicine in the next 1-3 months.

-An ongoing study validating an assay to measure the contraceptive deslorelin in goats. Results to be presented at the 2022 American Association of Zoo Veterinarians conference and the study will be published in next 12 months.

-A multi-zoo study on the use of Zoetis experimental Covid vaccine in goat.

-Continued work on establishing neonatal giraffe calf blood values. Poster presentation at 2022 American Association of Zoo Veterinarians conference.

POTTER PARK ZOO

Yearly Website Analytics 2021

2021 Website Analytics (compared to 2020)

Year Overview:

Overview

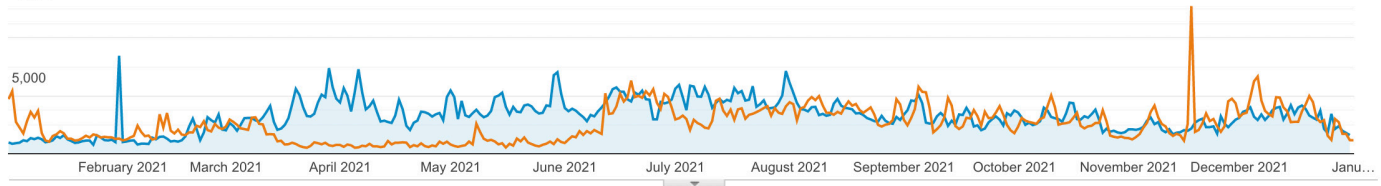
Pageviews vs. [Select a metric](#)

Hourly Day Week Month

Jan 1, 2021 - Dec 31, 2021: ● Pageviews

Jan 1, 2020 - Dec 31, 2020: ● Pageviews

10,000



Pageviews

29.07%

794,702 vs 615,728



Unique Pageviews

31.89%

683,789 vs 518,444



Avg. Time on Page

-4.69%

00:01:37 vs 00:01:42



Bounce Rate

10.68%

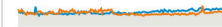
53.80% vs 48.61%



% Exit

7.24%

51.23% vs 47.77%



Users

50.17%

304,385 vs 202,688



New Users

49.97%

300,091 vs 200,105



Sessions

38.29%

407,920 vs 294,982



Number of Sessions per User

-7.92%

1.34 vs 1.46



Pageviews

29.07%

794,702 vs 615,728



Pages / Session

-6.67%

1.95 vs 2.09



Avg. Session Duration

-17.05%

00:01:33 vs 00:01:52



Bounce Rate

10.68%

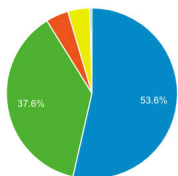
53.80% vs 48.61%



Acquisitions

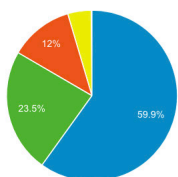
Top Channels

Jan 1, 2021 - Dec 31, 2021



■ Organic Search
■ Direct
■ Social
■ Referral
■ (Other)
■ Paid Search
■ Email

Jan 1, 2020 - Dec 31, 2020



■ Organic Search
■ Direct
■ Social
■ Referral
■ (Other)
■ Paid Search
■ Email

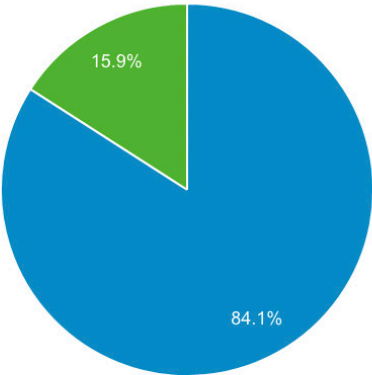
Acquisition			
	Users	New Users	Sessions
	50.17%	49.97%	38.29%
1 Organic Search	35.28%		
2 Direct	142.36%		
3 Social	46.32%		
4 Referral	42.97%		
5 (Other)	375.10%		
6 Paid Search	3,000.00%		
7 Email	57.14%		

Social Network		Sessions	Pageviews
		55.14% 15,168 vs 33,809	51.57% 24,895 vs 51,399
Facebook			
Jan 1, 2021 - Dec 31, 2021	13,719	88.14%	
Jan 1, 2020 - Dec 31, 2020	31,522	92.37%	
Instagram			
Jan 1, 2021 - Dec 31, 2021	461	4.99%	
Jan 1, 2020 - Dec 31, 2020	373	1.76%	
Twitter			
Jan 1, 2021 - Dec 31, 2021	450	2.95%	
Jan 1, 2020 - Dec 31, 2020	1,328	3.77%	

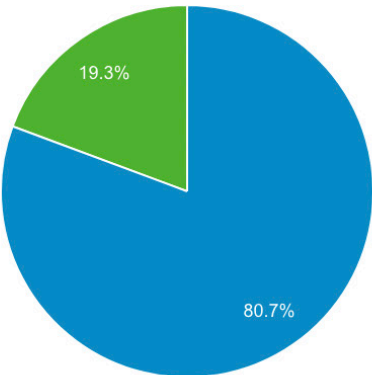
Audience

■ New Visitor ■ Returning Visitor

Jan 1, 2021 - Dec 31, 2021



Jan 1, 2020 - Dec 31, 2020



Top Pages

Page	Pageviews	% Pageviews
1. /		
Jan 1, 2021 - Dec 31, 2021	250,707	31.55%
Jan 1, 2020 - Dec 31, 2020	193,833	31.48%
% Change	29.34%	0.21%
2. /ticket-sales/		
Jan 1, 2021 - Dec 31, 2021	131,053	16.49%
Jan 1, 2020 - Dec 31, 2020	55,570	9.03%
% Change	135.83%	82.72%
3. /membership/		
Jan 1, 2021 - Dec 31, 2021	72,352	9.10%
Jan 1, 2020 - Dec 31, 2020	15,642	2.54%
% Change	362.55%	258.38%
4. /todays-attractions/		
Jan 1, 2021 - Dec 31, 2021	37,444	4.71%
Jan 1, 2020 - Dec 31, 2020	32,225	5.23%
% Change	16.20%	-9.97%
5. /events/		
Jan 1, 2021 - Dec 31, 2021	32,467	4.09%
Jan 1, 2020 - Dec 31, 2020	20,648	3.35%
% Change	57.24%	21.83%
6. /animals/		
Jan 1, 2021 - Dec 31, 2021	26,920	3.39%
Jan 1, 2020 - Dec 31, 2020	18,523	3.01%
% Change	45.33%	12.60%
7. /plan-your-visit/		
Jan 1, 2021 - Dec 31, 2021	18,151	2.28%
Jan 1, 2020 - Dec 31, 2020	5,361	0.87%
% Change	238.57%	162.32%

Country




Country	Acquisition
	Users
	50.17% 304,385 vs 202,688
1. United States	
Jan 1, 2021 - Dec 31, 2021	285,164 (93.62%)
Jan 1, 2020 - Dec 31, 2020	193,957 (95.44%)
% Change	47.02%
2. China	
Jan 1, 2021 - Dec 31, 2021	6,501 (2.13%)
Jan 1, 2020 - Dec 31, 2020	1,790 (0.88%)
% Change	263.18%
3. Indonesia	
Jan 1, 2021 - Dec 31, 2021	1,755 (0.58%)
Jan 1, 2020 - Dec 31, 2020	81 (0.04%)
% Change	2,066.67%
4. Canada	
Jan 1, 2021 - Dec 31, 2021	1,298 (0.43%)
Jan 1, 2020 - Dec 31, 2020	1,026 (0.50%)
% Change	26.51%
5. United Kingdom	
Jan 1, 2021 - Dec 31, 2021	1,293 (0.42%)
Jan 1, 2020 - Dec 31, 2020	964 (0.47%)
% Change	34.13%
6. (not set)	
Jan 1, 2021 - Dec 31, 2021	810 (0.27%)
Jan 1, 2020 - Dec 31, 2020	440 (0.22%)
% Change	84.09%
7. India	
Jan 1, 2021 - Dec 31, 2021	609 (0.20%)
Jan 1, 2020 - Dec 31, 2020	517 (0.25%)
% Change	17.79%
8. Switzerland	
Jan 1, 2021 - Dec 31, 2021	473 (0.16%)
Jan 1, 2020 - Dec 31, 2020	46 (0.02%)
% Change	928.26%
9. Australia	
Jan 1, 2021 - Dec 31, 2021	469 (0.15%)
Jan 1, 2020 - Dec 31, 2020	369 (0.18%)
% Change	27.10%
10. Germany	
Jan 1, 2021 - Dec 31, 2021	318 (0.10%)
Jan 1, 2020 - Dec 31, 2020	224 (0.11%)
% Change	41.96%

City:

City	Users	New Users
	50.17% 304,385 vs 202,688	49.96% 300,225 vs 200,209
1. Lansing		
Jan 1, 2021 - Dec 31, 2021	75,148	24.43%
Jan 1, 2020 - Dec 31, 2020	20,220	9.27%
2. Detroit		
Jan 1, 2021 - Dec 31, 2021	19,277	5.43%
Jan 1, 2020 - Dec 31, 2020	8,219	3.45%
3. (not set)		
Jan 1, 2021 - Dec 31, 2021	14,716	4.65%
Jan 1, 2020 - Dec 31, 2020	9,843	4.57%
4. Grand Rapids		
Jan 1, 2021 - Dec 31, 2021	14,337	4.01%
Jan 1, 2020 - Dec 31, 2020	14,443	6.01%
5. East Lansing		
Jan 1, 2021 - Dec 31, 2021	10,490	3.25%
Jan 1, 2020 - Dec 31, 2020	8,847	4.09%
6. Meridian charter Township		
Jan 1, 2021 - Dec 31, 2021	9,493	2.96%
Jan 1, 2020 - Dec 31, 2020	8,605	3.97%



Device Used: _____

<input type="checkbox"/>	Device Category ?	Acquisition		
		Users ? ↓	New Users ?	Sessions ?
		50.17%  304,385 vs 202,688	49.96%  300,225 vs 200,209	38.29%  407,920 vs 294,982
<input type="checkbox"/>	1. mobile			
	Jan 1, 2021 - Dec 31, 2021	170,542 (56.14%)	168,035 (55.97%)	249,782 (61.23%)
	Jan 1, 2020 - Dec 31, 2020	133,663 (66.38%)	132,949 (66.41%)	203,700 (69.06%)
	% Change	27.59%	26.39%	22.62%
<input type="checkbox"/>	2. desktop			
	Jan 1, 2021 - Dec 31, 2021	128,953 (42.45%)	127,940 (42.61%)	152,375 (37.35%)
	Jan 1, 2020 - Dec 31, 2020	62,500 (31.04%)	62,160 (31.05%)	83,963 (28.46%)
	% Change	106.32%	105.82%	81.48%
<input type="checkbox"/>	3. tablet			
	Jan 1, 2021 - Dec 31, 2021	4,296 (1.41%)	4,250 (1.42%)	5,763 (1.41%)
	Jan 1, 2020 - Dec 31, 2020	5,206 (2.59%)	5,100 (2.55%)	7,319 (2.48%)
	% Change	-17.48%	-16.67%	-21.26%

***Mobile is by far the most used device to access the website**

POTTER PARK ZOO

Monthly Analytics, January 2022

Facebook	Total Impressions: 707,016 Engagements: 41,055 Est. Reach: 323,547 Donations through facebook:		
	Followers: 67,236 to 67,390		Increase in followers: 144
Instagram	Total Impressions: 117,430 Content Interactions: 10,100 Est. Reach: 16,228		
	Followers: 27,826 to 27,901		Increase in followers: 75
Twitter	Total Impressions: 58,482 Engagements: 2,946		
	Followers: 8,761 to 8,808		Increase in followers: 47
Google Analytics	Page Views: 32,009 Sessions: 21,121 Users: 18,805		
	Top pages visited Membership: 8,699 Home: 6,490 /Veg/ (blog post): 1,815 Ticket Sales: 1,750 Today's Attractions: 962		
	Users	New Users	Sessions
	76.79% 18,805 vs 10,637	83.13% 18,227 vs 9,953	29.58% 21,121 vs 16,299
	Number of Sessions per User	Pageviews	Pages / Session
	-26.70% 1.12 vs 1.53	11.44% 32,009 vs 28,722	-14.00% 1.52 vs 1.76
	Avg. Session Duration	Bounce Rate	
	-25.37% 00:00:49 vs 00:01:06	18.30% 76.52% vs 64.68%	
	Top cities by users Lansing: 8,739 Detroit: 577 East Lansing: 381 Grand Rapids: 330 Meridian Charter Twnshp : 276		
	Pageviews	Unique Pageviews	Avg. Time on Page
	11.44% 32,009 vs 28,722	15.75% 29,070 vs 25,115	10.27% 00:01:35 vs 00:01:26
	Bounce Rate	% Exit	
	18.30% 76.52% vs 64.68%	16.30% 65.94% vs 56.70%	
	Acquisitions Direct: 11,140 Organic Search: 6,865 Referral: 392 Social: 319		

POTTER PARK ZOO
Notable Media Stories - January 2022

Potter Park Zoo announces birth of two endangered tamarins



(WILX)

By [Jake Draugelis](#)

Published: Jan. 13, 2022 at 3:25 PM EST



<https://www.wilx.com/2022/01/13/potter-park-zoo-announces-birth-two-endangered-tamarins/>

POTTER PARK ZOO

2022 Weekly Analytics - Jan./Feb.

Dates: Jan. 10 - 16			
Platforms	Facebook	Instagram	Twitter
Reach	198,488	11,020	X
Impressions	270,654	36,752	20,781
Engagements/Interactions	18,720	3,350	1,077
Followers (sunday)	67,318	27,869	8,784

Dates: Jan. 17 - Jan. 23			
Platforms	Facebook	Instagram	Twitter
Reach	58,800	6,851	X
Impressions	126,685	20,646	11,192
Engagements/Interactions	6,733	1,488	678
Followers (sunday)	67,355	27,895	8,791

Dates: Jan. 24 - Jan. 30			
Platforms	Facebook	Instagram	Twitter
Reach	79,955	7,761	X
Impressions	101,922	23,253	11,719
Engagements/Interactions	8,285	2,443	633
Followers (sunday)	87,377	27,902	8,800

Dates: Jan. 31 - Feb. 6			
Platforms	Facebook	Instagram	Twitter
Reach	80,823	10,130	X
Impressions	147,787	30,098	10,950
Engagements/Interactions	8,605	2,278	576
Followers (sunday)	67,429	27,915	8,825

POTTER PARK ZOO ADVISORY BOARD

Meeting of February 09, 2022

RESOLUTION AUTHORIZING AN AGREEMENT WITH TRANE U.S. INC.

WHEREAS, the Potter Park Zoo Discovery Center was built in 2000; and

WHEREAS, the HVAC system installed at that time did not have controls for temperature regulation which has resulted in inconsistent building temperatures and energy inefficiency; and

WHEREAS, a capital improvement project (CIP) in the amount of \$35,000 was requested and approved in the 2022 budget for the installation of a control system for the three air handlers, boiler and air conditioning unit; and

WHEREAS, per the Ingham County Purchasing Policy, vendors on the Omnia contract do not require three quotes; and

WHEREAS, Trane U.S. Inc. is on the Omnia contract; and

WHEREAS, it is the recommendation of the Zoo Director to enter into an agreement with Trane U.S. Inc., who submitted a proposal of \$61,640 for the HVAC upgrades at the Zoo Discovery Center; and

WHEREAS, a contingency of \$5,000 is requested for any unforeseen issues; and

WHEREAS, the approved 2022 CIP Discovery Center HVAC Controls Replacement line item #25869900 978000 funding falls short by \$31,640, including contingency; and

WHEREAS, the Zoo Director is requesting a transfer of \$31,640 from the Zoo fund balance to cover the shortfall; and

WHEREAS, the Potter Park Zoo Advisory Board is in support of entering into an agreement with Trane U.S. Inc. for the installation of HVAC controls in the Discovery Building; and

WHEREAS, the Potter Park Zoo Advisory Board is in support of transferring \$31,640 from the Zoo fund balance for the completion of this CIP.

THEREFORE BE IT RESOLVED, that Potter Park Zoo Board recommends to the Ingham County Board of Commissioners to hereby authorize entering into an agreement with Trane in an amount not to exceed \$66,640.

POTTER PARK ZOO ADVISORY BOARD

Meeting of February 09, 2022

RESOLUTION AUTHORIZING A MATERIAL DONATION TO THE CITY OF LANSING

WHEREAS, Potter Park Zoo previously operated a portable radio system utilizing the Board of Water and Light system; and

WHEREAS, the Board of Water and Light system required the use of specific Motorola radios; and

WHEREAS, Potter Park Zoo entered into an agreement with Bearcom in 2017 for the purchase of portable radios, antennae and repeater to operate an onsite radio system; and

WHEREAS, the Motorola radios previously used by the Zoo on the Board of Water and Light system do not function on the new Zoo radio system and have been discontinued by Motorola; and

WHEREAS, the City of Lansing Public Service Department uses the Board of Water and Light system and is in need of the discontinued digital Motorola XPR 6380 radios the Zoo owns; and

WHEREAS, the Zoo Director is requesting to donate three digital Motorola XPR 6380 radios owned by the Zoo to the City of Lansing Public Service Department.

THEREFORE BE IT RESOLVED, that Potter Park Zoo Board recommends to the Ingham County Board of Commissioners to hereby authorize the donation of three Motorola XPR 6380 digital radios to the City of Lansing.

3. CONSERVATION

General Considerations:

Impactful and sustainable conservation initiatives are a priority for AZA-accredited zoos and aquariums. These include contributing to and promoting the long-term survival of species in natural ecosystems, and full support of AZA *ex situ* programs such as Species Survival Plans (SSPs) and Saving Animals From Extinction (SAFE). Green practices, education, conservation studies, advocacy, and engagement programs emphasizing the institution's and community's role in ecosystem conservation and stewardship of natural resources should inspire conservation action with measurable outcomes both at the institution and in the community/society-at-large to address the causes of species endangerment.

Welfare Considerations:

Conservation ethics, practices, messaging, and funding helps improve the welfare of animals in the wild and their counterparts in human care. Animal welfare should be considered as a component of field conservation projects supported by AZA-accredited zoos and aquariums.

3.1. Mission

- 3.1.1. Conservation must be a key component of the institution's mission and messaging.

Explanation: For the purposes of AZA accreditation, conservation is understood to be active stewardship of the natural environment, including animals, plants, and other natural resources.

3.2. Conservation Program

- 3.2.1. The institution must follow a written conservation action plan/strategy with defined measurable outcomes in proportion to the size and scope of the organization with the goal of demonstrating continuous improvement in each area. The plan must include components outlining the institution's commitments to its conservation practices, including each of the following:

- Field conservation efforts (e.g., supporting local and/or global priorities including paid staff or volunteer involvement of field programs, or financial support of impactful field programs). Such programs are those that have a direct and measurable impact on animals and habitats in the wild.
- Natural resource conservation and sustainability/green practices such as water conservation initiatives; energy use reduction and alternative sources; waste management for recyclables, compostables, combustibles, and toxic and hazardous materials; sustainable purchasing and contracts; green construction, and other green practices.
- Connecting the animal collection with saving species in the wild (e.g., conservation messaging, advocacy, supporting reintroduction programs, donating to and/or engaging in applied research, etc.)
- Conservation education, advocacy, and engagement programs measured against the written conservation goals of the institution.

Explanation: Each institution must participate in practices that implement its conservation action plan/strategy, which itself should include a variety of measurable and impactful outcomes. Metrics for monitoring and assessing impact may include, but are not limited to,

measures of direct conservation impact (population sizes, area conserved, etc.), conservation spending (both gross amount and percentage of operational budget are instructive), number of staff dedicated to conservation, etc. Being the lead agency or partnering with other agencies/organizations on field conservation programs is one of the most significant ways AZA institutions can demonstrate their role in ecosystem conservation and wildlife preservation. AZA institutions have the responsibility to demonstrate responsible resource management, acting as leaders in their communities. Helping guests and paid and unpaid staff engage in the conservation commitments of the institution is core to our missions. Lists of programs and projects submitted to AZA's Annual Report on Conservation and Science (ARCS)-related surveys serves as evidence that the institution is following its conservation action plan/strategy.

- 3.2.2. Each institution must evaluate, measure, and monitor the impact of its written conservation action plan/strategy.

Explanation: Some form of regular evaluation of conservation efforts must occur. Measurement of impact can include assessment of achievement of programmatic goals, actual measure of impact on species and habitat conservation, and/or some other quantitative measure of success.

- 3.2.3. The institution must submit ARCS (Annual Report on Conservation and Science) surveys annually to AZA.

Explanation: AZA collects ARCS surveys annually from member facilities and compiles the data to illustrate the collective effort dedicated to field conservation, research, education, and green practices. Full participation is necessary to accurately measure and report the cumulative conservation activity of accredited institutions and certified related facilities to local, regional, national, and international stakeholders (e.g. community, government, funders, partners). Institutions and related facilities should maintain records of the past five years of ARCS survey submissions for review by accreditation inspectors during on-site inspection.

3.3. Participation/Support

- 3.3.1. The institution must participate in every SSP that pertains to an animal within their collection. The institution may indicate at what level it desires to participate in each SSP.

The institution should participate in every SAFE program that pertains to an animal within their collection.

- 3.3.2. The institution must actively support and participate in AZA animal programs, and cooperate in providing requested information regarding its animals in a timely fashion to AZA Program Leaders, including Studbook Keepers, SSP Coordinators and Chairs, SAFE programs, and follow agreed upon recommendations (e.g., breeding and transfer plans; acquisitions, transfers, and transitions, etc.).

- 3.3.3. [See 3.3.2]

4. EDUCATION AND INTERPRETATION

General Considerations:

This section includes all questions related to education and interpretation. Collectively, education and interpretation refer to: programming on-site and off-site for targeted audiences such as school groups, teachers and families, as well as all types of interpretive methods for guests, for example, graphics, exhibits, ambassador animal use, and animal care specialist talks. Institutions may differ organizationally in how they accomplish these tasks (e.g., some institutions may have an Exhibits Department, or graphics may be coordinated by the Art Department). What is key is the role of the paid and unpaid education staff in the accomplishment of these tasks. Institutions are encouraged to share educational and interpretive programming, materials, and evaluation techniques with other AZA institutions.

Welfare Considerations:

AZA-accredited zoos and aquariums must be innovative and dynamic conveyors of their science-based mission and goals. Knowledge creates awareness that leads to change, and impacts animal welfare in both AZA-accredited institutions and in the wild. Educated populations are overwhelmingly more supportive of actions and practices that promote the care, welfare, and conservation of wildlife.

4.1. Mission

- 4.1.1. Education must be a key component of the institution's mission.

Explanation: Education is an important component in the conservation mission of each institution. Effective educational programming is a proven method of increasing awareness and participation in stewardship of the natural world.

4.2. Education Program

- 4.2.1. The institution must follow a written education plan that includes goals and objectives.

Explanation: The institution's education plan must include a copy of its education vision/mission, as well as strategic goals and objectives. The plan may include a copy of the organizational chart, and description of how the education department interacts with other departments on issues such as exhibit and graphics' development, animal care specialist presentations, *in situ* conservation programs, etc. The plan should include the institution's conservation messages.

- 4.2.2. The education department must be under the direction of a paid staff person who is trained or has experience in educational programming. Education personnel should be involved in the development of exhibits, graphics, and interpretation, as well as all structured programs for the visiting public.

- 4.2.3. Institutions should participate in active, ongoing collaborative partnerships with organizations and individuals that can contribute to the expansion of their educational dimension. Such partnerships may include community groups, other informal education institutions (museums, science centers, nature centers, etc.), school districts, institutes of higher learning, other conservation organizations and government agencies.

- 4.2.4. Institutions should provide paid and unpaid staff access to informational resources with the goal of supporting excellence in programs, animal management, and exhibits. These resources may include a facility library, access to an offsite library or electronic access to internet resources.

4.3. Evaluation/Interpretation

- 4.3.1. Classes, programs, animal talks, interpretive programs and other education programs should be evaluated on a regular basis for effectiveness and content. Programs should be updated with current scientific information, with an educational/conservation message as an integral component. These evaluations should assess more than participant satisfaction, looking also at program impact (ideally including impact on conservation-related knowledge, attitudes/affect, and behavior). Results from evaluations should be used to improve the existing programs and to create new programs.

- 4.3.2. The institution should have a thorough understanding of the needs of its audiences and as such provide programs to meet these needs.

Explanation: Zoo and aquarium education can be accomplished by programs offered to a wide variety of audiences and paid/unpaid staff through an assortment of programmatic methods: publications, exhibit interpretation, on-site presentations, tours, summer camps, speaker's bureau, outreach programs, teacher training, etc. The institution need not reach ALL audiences equally, but a thoughtful approach to audience selection should be evident – e.g., a clear understanding of their audience's needs, including the needs of under-represented groups and groups with special abilities. Similarly, not all types of programming must be used equally, but a thoughtful approach to program development must be evident. Programming should include local/global conservation issues and topics, the role of zoos and aquariums in conservation, information on AZA and other conservation-oriented organizations; as well as ways that the institution acts as a resource in its community for wildlife conservation education and related issues. Programming should clearly address cognitive, affective, and behavior outcomes (i.e., options for individual action that encourages stewardship in conserving the environment).

- 4.3.3. The exhibit graphics and other interpretive devices must be in good condition and functioning, and be based upon relevant scientific knowledge and reflect relevant interpretive methods.

Explanation: The interpretive program must be based on the thoughtful development of conservation messages for the institution. Exhibit interpretation may include information regarding the animal's natural history, conservation, care and welfare, ecology, relation to humans, correct taxonomic identification and current status (i.e., endangered or threatened), as well as botanical collections, and specific environmentally responsible behaviors visitors are being encouraged to take. In particular, inclusion of interpretation on AZA's cooperative management programs (e.g., SSPs and TAGs) is encouraged.