

A publication of the Seneca Park Zoo Society

ZOONOOZ

OCTOBER 2021

Support Systems:
Behind-the-Science in Zoo Operations

Seneca Park Zoo inspires our community to connect, care for, and conserve wildlife and wild places.

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Nov. 1 – March 31:
10 a.m. – 4 p.m.
last entry at 3 p.m.

April 1 – Oct. 31:
10 a.m. – 5 p.m.
last entry at 4 p.m.

**MEMBERS MAY
ALWAYS ENTER
AT 9:30 A.M.**

LETTER FROM

Pamela Reed Sanchez
President and CEO
Seneca Park Zoo Society

On My Mind:
*Adapting to the
Inevitability of Change*

At this time of year, the bright yellows and oranges of autumn leaves I see out my window are a stark contrast from my views of the dozen years I lived in Phoenix, where the changing of seasons is barely noticeable. Here, the variations we see weekly in walks around our neighborhoods or out on a trail are amazing reminders of the cycle of nature as we move around the sun each year. The warblers have departed for warmer regions, making way for the bright blues and reds of jays and cardinals as they find more space at our feeders. At the Zoo, the cooling air and shorter days seem to awaken the snow leopards, lynx, red pandas, river otters, and more.

Nature reminds us that everything has a season, and that animals – including humans – have behaviors and adaptations that allow us to change with the seasons. For some animals, that means a new set of feathers or a thicker coat of fur. Others stock up on food supplies, while others hibernate, and still others take flight.

Not all of the Zoo's animals, however, can simply adapt to our climate, so we do what is needed to ensure their welfare, comfort, and safety. You may have noticed misters and fans in the snowy owl habitat this summer, or the shade structure over the sea lion pool. But there's a lot you might never see, behind-the-scenes, and this issue of ZooNooz does a deep dive into the unseen and unsung heroes of the life support systems staff at Seneca Park Zoo.

Nature reminds us change is inevitable, and there are some exciting changes at Seneca Park Zoo to share with you. Beginning in October, the SSA Group has taken on the role of managing food service and retail operations for Seneca Park Zoo. The SSA Group is a private company headquartered



in Denver, Colorado, with a nationwide network of zoos and cultural attractions for which they provide a multitude of services.

Monroe County leadership determined the best path forward for Seneca Park Zoo was to contract with SSA Group for some of the functions previously performed by the Zoo Society. Although the Zoo Society has operated both food and gift since their inception at the Zoo, we agree this change is a positive one, and look forward to working alongside our new partners at the SSA Group to fulfill the mission of the Seneca Park Zoo.

Next time you visit the Zoo, you'll likely see new menus, and new offerings at the ZooShop and Savanna Outpost. And soon, the SSA Group will take on the role of managing the Admissions area, and you may see changes in the way advanced reservations are redeemed.

We know most people (even members!) who visit the Zoo aren't aware that some of the Zoo's operations are conducted by Monroe County, and some by the Zoo Society, and, now, some by the SSA Group. That's how it should be! We want you to have a seamless, welcoming visit that has you wanting to come back again and again, and that inspires you to connect with, care for, and conserve wildlife and wild places.

A WILDER VISION: **SENECA PARK ZOO**



**COMING
SOON**

**Zoo Welcome
Center**

Tropics Complex

**Conservation
Resource Center**

**Habitat
Renovations**

A Wilder Vision: Seneca Park Zoo's Master Plan Progress

The Zoo continues its transformation, building new animal habitats, renovating older areas of the Zoo, improving accessibility, and enriching the overall guest experience. We are creating a destination where all people are moved to help save animals from extinction and live more sustainably.

When complete, your Zoo will be home to world-class animal habitats providing jaw-dropping experiences for guests, with amenities designed for tomorrow's audiences.

A Wilder Vision Phase One Accomplishments:

- Establishment of the Cold Asia area of the Zoo providing naturalistic habitats for red pandas and snow leopards along with amazing viewing opportunities for guests.

- Opening of Animals of the Savanna area that spans five acres and introduces Masai giraffes, plains zebras as well a new habitat for white rhinos. Inside the Savanna building, guests encounter naked mole rats, multiple bird species, reptiles, amphibians, insects, and small mammals from East Africa.
- Addition of the Savanna Outpost, a retail and concession building with a giraffe feeding platform.
- Demolition of the Zoo's outdated Main Building.
- Seasonal Tram service transporting guests from one end of the Zoo to the other.

2021

- Construction of the Trailside Café providing Zoo guests with first-class amenities that model and teach sustainable practices, while maximizing earned revenue opportunities for food services and catered events.

- Design of the Tropics Complex, Welcome Center, Conservation Resource Center, and the next phase of Cold Asia habitats, including new space for Amur tigers.

2022-2024

Construction of

- Zoo Welcome Center, which will be a national model for inclusion and sustainability as well as home to guest services, membership, administrative offices, and a new and expanded ZooShop.
- Tropics Complex, featuring outdoor and indoor habitats for species representing the ecosystems of Borneo and Madagascar, returning orangutans and lemurs to Seneca Park Zoo.
- Conservation Resource Center, featuring space for adult education, classrooms, event space, and exhibits highlighting the Zoo's role in conservation worldwide.

WILDER VISION

Funds Currently Raised

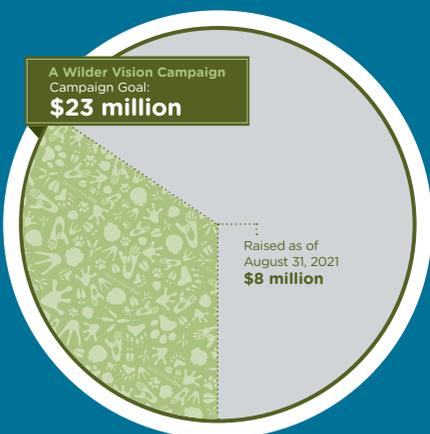
As the Zoo's nonprofit partner, the Seneca Park Zoo Society is raising \$23 million to ensure completion of the Zoo's transformation. To date, just over \$8 million has already been secured. We need your help and that of many others to help realize this vision for the future of this wonderful community asset.

To learn more about the *A Wilder Vision* Capital Campaign and detailed information on giving including naming opportunities, please contact:

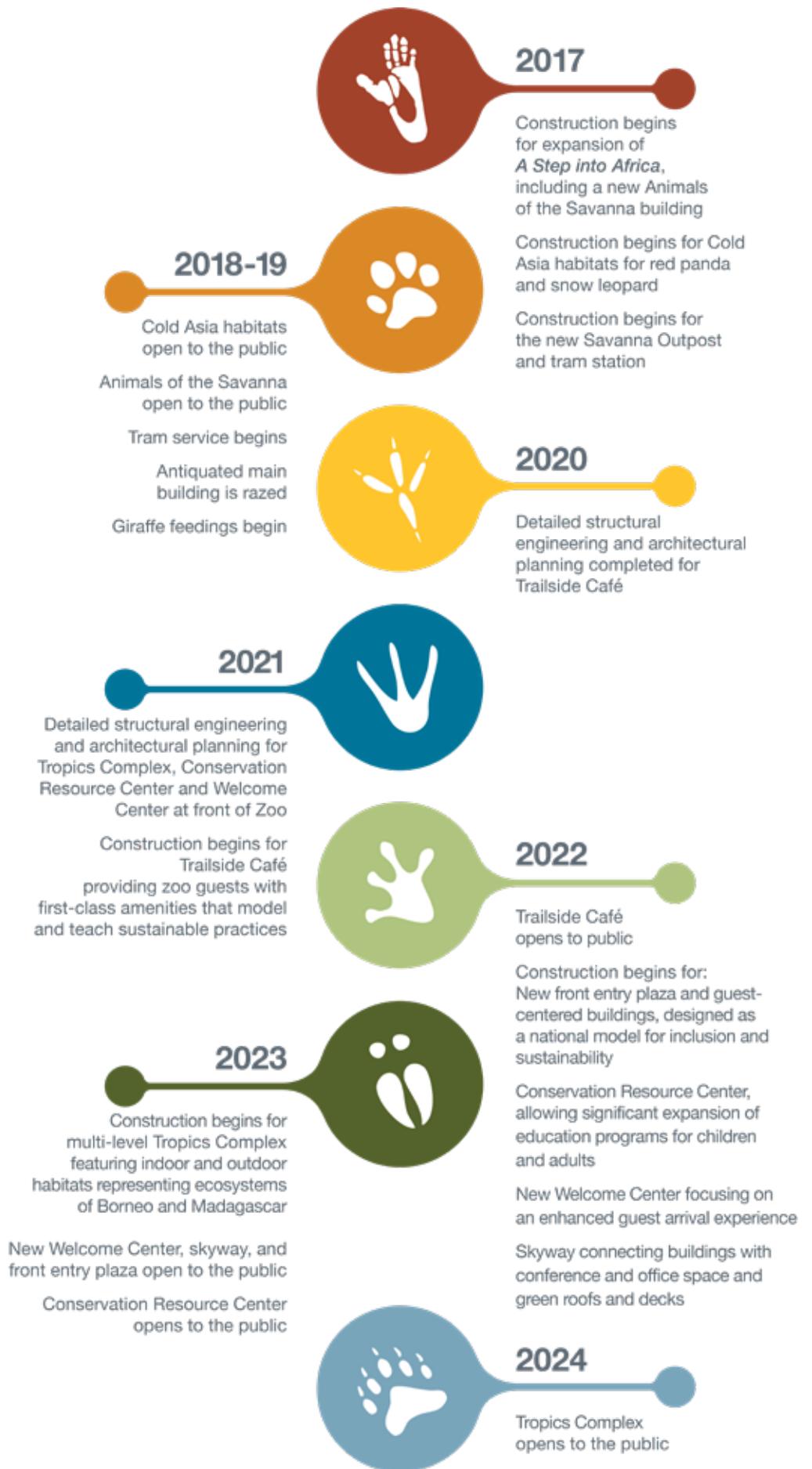
Chuck Levengood
Director of Development
 585.336.7205
 clevengood@senecazoo.org **OR**

Pamela Reed Sanchez
President and CEO
 585.336.7210
 preedsanchez@senecazoo.org

Gifts of all sizes are needed. Please join donors who have already invested in the Zoo's *A Wilder Vision* Capital Campaign. Please reach out if you would like to schedule a tour to see the transformations that have already taken place and for a preview of what is to come!

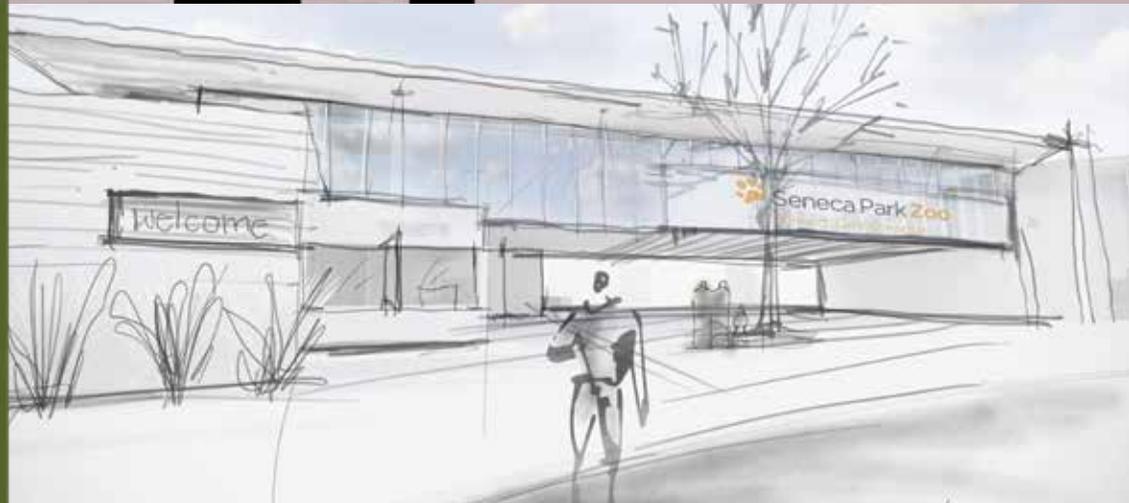


DEVELOPMENT TIMELINE





A
**Wilder
Vision**
Inspiring wonder,
conserving the natural world.



Create a Zoo legacy and become a member of the Forever Wild Society

Create a Zoo legacy

If the Seneca Park Zoo has enriched your life, consider a planned gift to create a legacy that will help ensure its future. Since November of 2012 over 76 individuals/couples have invested in the Zoo's future by becoming Forever Wild Society members.

Membership in the Forever Wild Society is a deferred gift of \$2,000 or more to the Seneca Park Zoo Society's Endowment Fund.

Becoming a member of the Forever Wild Society is a win-win because you can benefit the Zoo and your family now and in the future with a charitable planned gift. All Forever Wild Society gifts must include "Seneca Park Zoo Society Endowment Fund" to assure that the gift is placed in the endowment fund.

To learn more, or to join the Forever Wild Society, contact **Chuck Levorgood** at clevengood@senecazoo.org or 585.336.7205.



James Weinpress

A polar bear is swimming underwater in clear blue water. The bear's head and front paws are visible, and it appears to be holding a large, red, spherical buoy. The water is filled with many small bubbles, suggesting the bear is breathing or exhaling. The overall scene is serene and captures a moment of the bear's life in its natural habitat.

**Aquatic Support Systems:
Behind-The-Science with our
Aquatic Life Support Operators**

Aquatic Life Support Systems

Aquatic Life Support Systems support polar bear, sea lion, river otter, and penguin pools, as well as eagle pond, sturgeon, hellbender, cichlid and reef tanks. These habitats require management of more than 250,000 gallons of water daily.

Supporting aquatic life is something of a hybrid position, combining both animal care and facilities expertise. It requires chemistry, engineering, plumbing, mechanical and zoology knowledge. Our Zoo staff are also extremely adept problem-solvers, regularly troubleshooting and addressing any issues as they arise.

Aquatic Life Support Systems is supported by:

Kristen Miles-Pavia
Supervisor of Aquatic Life Support and Facilities

Luke Hawley
Life Support Operator

Adam Melinis
Assistant Life Support Operator

All AZA-accredited zoos and aquariums are required to regularly monitor water quality. High quality of water enhances

animal health programs, and tests for pH, chemicals, alkalinity, turbidity (clarity of water), and bacteria are done regularly. Seneca Park Zoo uses zero chemicals to treat water, meaning no halogen, bromine, or chlorine. Instead, we rely on sand filtration, mechanical filtration, and oxidation sterilization protocols. Aquatic animal habitats each require specific water quality measures. Sea lion and polar bear pools filter 1,000 gallons per minute and 700 gallons per minute respectively. The sea lion pool requires higher filtration because there are four animals that live in that habitat, whereas Anoki the polar bear takes a dip several times a day.

**SEA LION
POOL
100,000
gallons**

**POLAR BEAR
POOL
100,000
gallons**

**AFRICAN PENGUIN
50,000 gallons**

**RIVER OTTER &
EAGLE POND 15,000 gallons**

**REEF, STURGEON,
HELLBENDER & CICHLID
TANKS 1,900 gallons**

Aquatic Support Systems: Behind-The-Science with our Aquatic Life Support Operators

(continued)

The Process

Filtration and sterilization begin with mechanical filters. These giant inline strainers filter out large particles, waste, and other debris like leaves and sticks, that fall into the pools. After the water is strained, it travels through five large pumps, which pull the water through the system. All water flowing through the pumps is measured for flow and volume using special gauges.

Water is then pumped through horizontal sand filters. Coarse-grained sand and gravel efficiently remove suspended solids through straining and absorption. Layers of graded gravel line the bottom of the tank over networks of drainage pipes, and over that, the sand.

After the water exits sand filtration, it is then sterilized with ozone. Seneca Park Zoo does not use chemicals for sterilization, partly because of the threats that traditional chemical treatments pose to ecosystems. Ozone is a superior disinfectant and one of the strongest oxidants, it is often used in drinking water supplies and air purification settings. The Zoo generates and contacts ozone on site, requiring specific knowledge and systems support for these complex processes.

Once water is contacted with ozone, it is then passed through a cyclonic separator that spins the water, followed by a heat source, removing the ozone completely.

Polar bear water heads directly to the habitat. However, before making its way back into the sea lion habitat pool, water may be chilled. Sea lions require water temperature below 68 degrees or else it may be harmful to them. While not necessary in cooler months, water must be cooled during summers, and it is passed through a 55-ton chiller.

This whole process takes seconds and is supported by hours and hours of hard work by our Aquatic Life Support team. The next time you're in Rocky Coast Gallery, know that just under your feet, systems and dedicated staff are working around the clock to ensure the best possible environments for the animals in our care.



Beth LaPierre



Beth LaPierre



Kristen Miles-Pavia



Beth LaPierre



Beth LaPierre



Beth LaPierre



Beth LaPierre

AWARENESS WEEKENDS

▶ AWARENESS WEEKEND: PENGUIN

OCTOBER 2 & 3

Join us in celebrating and supporting the conservation of African penguins! We will have some great penguin-focused content to share, a fundraiser and there will be live enrichment/demos going on throughout the weekend!

Dates: October 2 & 3

Price: Free

senecaparkzoo.org/event/penguins21

▶ AWARENESS WEEK: SNOW LEOPARD & RED PANDA

NOVEMBER 1 - 7

Join us in celebrating and supporting two of our favorite 'Cold Asia' animals in snow leopards and red panda! We will have some great content, activities, and more!

Date: November 1 - 7

Price: Free

senecaparkzoo.org/event/SL-RP21/



Kristen Matteo



Wayne Smith



Kristen Matteo

▶ COMMUNITY NATURE TREKS

OCTOBER 2, 9 & NOVEMBER 6, 7



Join a Seneca Park Zoo naturalist for a socially-distanced hike to explore nature and wildlife! Each is limited to 25 participants and they always fill up fast! Check out our website to see the locations we'll be hiking and to register.

Dates: October 2, 9
November 6, 7

Price: Free

Registration is required: senecaparkzoo.org/hikes



Wayne Smith

▶ COMMUNITY CLEANUPS

OCTOBER 30



Autumn Community Cleanup! Experience local nature during the fall season! Join your Zoo and like-minded neighbors to help clean up a local park, ensuring a cleaner start for the winter!

Date: October 30

Time: 9 a.m.

Location: Maplewood Rose Garden

Price: Free

Registration is required: senecaparkzoo.org/cleanup



Erick Machajewski

▶ WILDLIFE ACTION CREW

NOVEMBER 3, 10, 17 & DECEMBER 1, 8, 15

Wildlife Action Crew is for teenagers interested in animals and conservation. Teens conduct a conservation case study, learning about and discussing a conservation issue, animals that are affected, and what is being done to help. They will select an action that addresses the conservation issue and work in groups to create a campaign to promote their message. This is a six-week program that is offered multiple times throughout the school year.

Ages: 13 to 18-year-olds

Price: \$55 for Zoo members; \$60 for non-members

When: Wednesdays 6 – 8 p.m. (6 weeks)

Dates: Red Pandas & Deforestation –

November 3, 10, 17 and December 1, 8, 15

Register: senecaparkzoo.org/wildlife-action-crew/

COMMUNITY ACTIVITIES & EVENTS

▶ ACTIVITIES/EVENTS

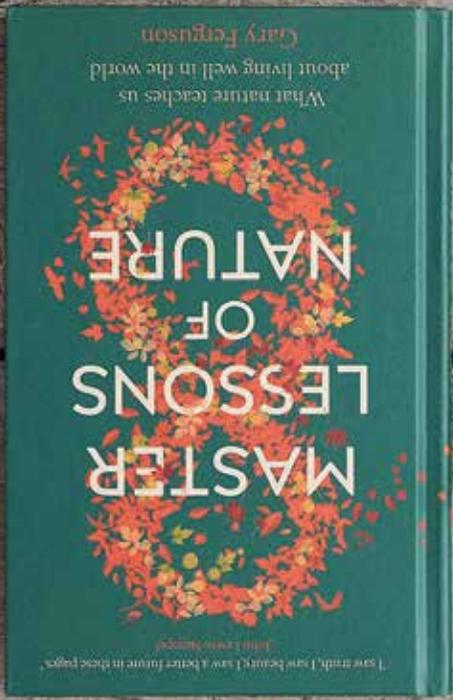
VIRTUAL BOOK GROUP

Pages With a Purpose: Virtual Book Group

For our November Pages with Purpose: Virtual Book Group, we're excited to welcome renowned author Gary Ferguson to join us! Ferguson has written for a variety of national publications and is the author of 27 books on nature and science. For this discussion we will be looking at "The Eight Master Lessons of Nature: What Nature Teaches Us About Living Well in the World", a riveting manifesto for the millions of people who long to forge a more vital, meaningful connection to the natural world to live a better, more fulfilling life.

Gary will be joined by Mary M. Clare, his wife and co-author of Full Ecology: Repairing Our Relationship with the Natural World, which was released in April of this year.

Book available for purchase in Zoo Shop.
More Info: senecaparkzoo.org/bookgroup



▶ HOMESCHOOL ZOOCLASS

NOVEMBER 1, 8, 15 & 22

Homeschool ZooClass is a four-session series of classes, designed for homeschool families, based on our most popular thematic programs. Projects encourage both individual and group learning, while providing students with the opportunity to take an extended and interdisciplinary look at the wonders of the Zoo!

Fall Dates: November 1, 8, 15, 22 from 12 – 4 p.m.

Price: Members: \$90 per student

Non-members: \$110 per student

(Cost includes all four classes. Dates not sold separately.)

Register: senecaparkzoo.org/homeschool-programs

▶ DAY OFF ZOO CAMP - COLUMBUS DAY & VETERANS DAY

OCTOBER 11 & NOVEMBER 11

At ZooCamp we spend the day exploring our artistic side with arts and crafts of all kinds. Join us as we get inspired using animals as our opportunity for some crafty fun!

Ages: 5 through 9

Dates: October 11, November 11

Full-day: 9 a.m. - 4 p.m.

Price: \$45 for members, \$55 for non-members

▶ KINDERZOO

SEE WEBSITE FOR AVAILABILITY

KinderZoo is a program for preschoolers and their grown-ups to play, discover, and learn in a fun, interactive way. Join us as we explore different animals and habitats, using games, BioFacts, and engaging activities. Each class will include the opportunity to meet an ambassador animal up-close and learn all about them!

Ages: 18 months – 2 years & 3 - 5 years

Dates: See website to check date availability

Price: \$8 for members, \$10 for non-members

Register: senecaparkzoo.org/kinderzoo



Tricia Chapman



Wayne Smith



Rita Buen

▶ TREK IN THE TWILIGHT

**OCTOBER 8, 15/NOVEMBER 5, 13/
DECEMBER 10, 18**

Trek in the Twilight is just like our popular Bunk with Beasts program but without the overnight! We still provide dinner, a guided Zoo tour, and an animal presentation, but participants get to go home and sleep in their own beds at the end of the night.

Dates:

October 8, 15

November 5, 13

December 10, 18

OR

Pick Your Own Date!

Time: 5:45 - 9:30 p.m.

Price: \$25 per scout, \$20 per chaperone

A \$50 deposit is due two weeks after booking.

Learn More: senecaparkzoo.org/trek-twilight

▶ DAY-OFF ZOO CAMP MINI SERIES

DECEMBER 28 - 30

School is out, so come to the Zoo instead! Mysteries abound in this camp! Each day will feature a new mystery animal (or two) for campers to determine through clues about their habitats and adaptations. It's like Summer ZooCamp in a single day!

Dates: December 28 - 30

Full-day: 9 a.m. - 4 p.m.

Price: Members: \$45 for one day;

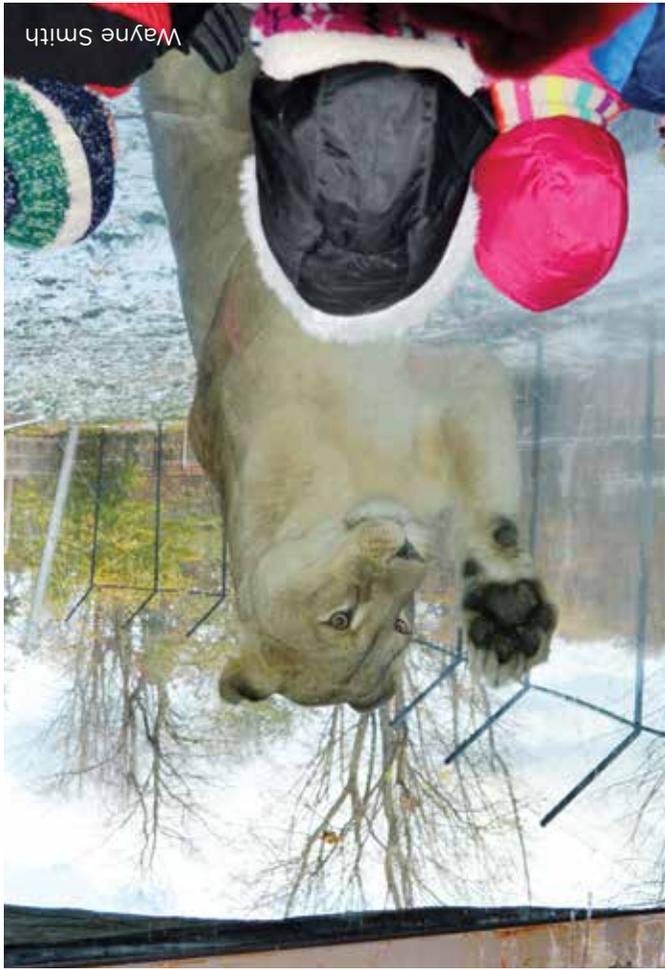
\$135 for full series (all three days)

Non-members: \$55 for one day;

\$165 for full series (all three days)

These camps can be signed up for separately/individually, but they were created as a 'mini-series' and so we hope many can join us for all three!

Register: senecaparkzoo.org/zoo-camp-mini



Wayne Smith



Sarah Michaels

▶ BREAKFAST WITH SANTA

PLACE YOUR ORDER BY NOVEMBER 25

Due to popular feedback and uncertainty that could surround the winter season, Breakfast with Santa will again be celebrated "at-home" this year. Pre-order your breakfast kit, which will include everything you need for a pancake breakfast at home for 4-5 people. In addition, you will receive the annual ornament, crafts and activities for two children. You can add additional ornaments and activities for additional children. Of course, no Breakfast with Santa is complete without Santa! You'll receive a family video message and personalized letter direct from the North Pole!

Breakfast with Santa is a fundraiser with proceeds supporting Seneca Park Zoo Society's education and conservation programs.

Members may purchase kits starting October 1

Non-members may purchase kits starting November 1
Order your breakfast by November 25.

Price: \$45 for Breakfast with Santa for 4-5 people
(includes activities/ornament for two children)

\$7.50 for activities/ornament for each additional child.

CAMPS, WORKSHOPS, CLASSES

▶ SCOUT WORKSHOPS

VISIT SENECAPARKZOO.ORG/SCOUTS

Seneca Park Zoo offers an array of workshops for all levels of scout troops. Programs are designed to meet badge requirements and build skills. The Zoo offers both in-person and virtual workshops for both Scouts and BSA Merit Badges. In-person workshops range from two-and-a-half to three hour sessions while virtual workshops range from 30 minutes to 1 hour.

Scouts BSA – Merit Badge Workshop:
Mammal Study (in-person) – November 6

Scouts BSA – Merit Badge Workshop:
Mammal Study (virtual) – November 21

Additional dates are available for plan your own workshops. For more information, including pricing and requesting a date, visit senecaparkzoo.org/scouts



Marie Kraus



Elesa Kim

CALENDAR

Mark your calendars for what's next at your Zoo.

FAMILY ACTIVITIES & EVENTS

▶ ZOOBOO

OCTOBER 16 & 17, 23 & 24, 30 & 31

The tradition continues! Don your best Halloween costumes and celebrate with the whole family at Seneca Park Zoo. Enjoy a beautiful fall day strolling the Zoo, and take part in unique, holiday-themed stations. Enjoy visits with costumed characters, scheduled entertainment and special guests each weekend, and costume parade twice each day!

Dates: Every Saturday & Sunday

Oct. 16 & 17 Sci-Fi and Super Heroes weekend

Oct. 23 & 24 Pirate Weekend

Oct. 30 & 31 Goblins and Ghouls Weekend

Price: \$5

Purchase your ZooBoo bag inside the gate to participate in trick-or-treating throughout the Zoo.

More information: senecaparkzoo.org/zooboo

▶ AFTER DARK

OCTOBER 16, 23 & 30

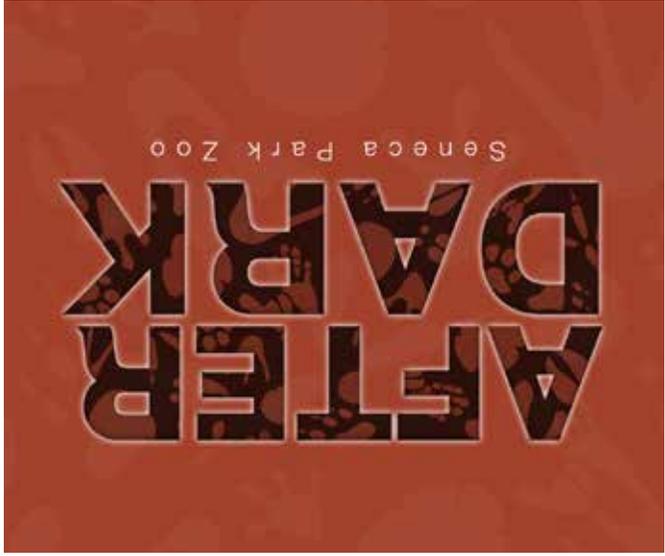
Our spooky, scarier after-dark guided flashlight tour of the Zoo for the slightly older crowd is back this year! We recommend at least ages 10+ for this as we will be highlighting more of the spooky/graphic aspects of the animals and their behaviors and there's a good chance there will be some scares along the way!

Dates: Saturdays October 16, 23 and 30

Time: 6:15 – 9 p.m.

Price: Pre-sale only \$15 Members, \$20 Non-members

Tickets: senecaparkzoo.org/afterdark



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Beth LaPierre, Director of Communications & Engagement
Donato DiRenzo, Communications Coordinator

Internationally, and in our own backyard, Seneca Park Zoo plays a key role in species survival. Chartered as an educational institution in 1957 by New York State, the Seneca Park Zoo Society plays an integral role in supporting Monroe County, the owners and operators of the Zoo. Together, we are working to bring animals back from the brink of extinction.

senecaparkzoo.org | 585.336.7200 | The Zoo is open 362 days a year.



Follow us socially. Visit senecaparkzoo.org

Elesa Kim

OCTOBER 2021

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