Polar Frontier debuted in May 2010, bringing the return of the species Zoo guests had most often requested: the polar bear. The new region also added a fresh dynamic to the Columbus Zoo’s oldest region of North America. This state-of-the-art attraction offers above-ground and under-water views of the polar bears as they dive for the rainbow trout, up-close views of the brown bear brothers and arctic foxes, an indoor educational center, and an outdoor play area.

Designed to resemble an abandoned mining town, Polar Frontier presents an imaginative, engaging way to learn about the Arctic Circle. Visitors can learn more about the ecosystem through interactive displays and are encouraged to take active steps in protecting the environment.

REGION ATTRACTIONS

In addition to the animal habitats, Polar Frontier includes:

**ICE BEAR OUTPOST**
Designed as an old mining camp, this indoor, interpretive center features games, research stations, and educational videos. Thanks to the support of Battelle, an exciting, interactive floor projection was introduced in 2016. The floor depicts Arctic animals navigating different levels of sea ice, creating a fun and immersive experience that helps guests understand the relationship polar bears have with their environment.

**POLAR PLAYGROUND**
One of many playgrounds at the Zoo, the Polar Playground is designed to resemble a tundra expedition, complete with a stationary buggy, a teeter-totter, kid-friendly zip-line, and climbing structures. Kids can hop from one piece of sea ice to the next, build an igloo, and imagine what it would be like to slide down snowbanks with a polar bear family. It is typically open from March through October.

**YUKON FOSSILS & GEMS GIFT SHOP**
Located inside the Ice Bear Outpost, this shop offers arctic souvenirs, animal plush toys, and a beautiful array of gems, rocks and crystals.

**YUKON FOSSILS & GEMS GEMSTONE PANNING**
Participants can try their panning skills as treasures drift through a trough near the region’s entrance. Prices range from $8-12.
KEEPER TALK
The Keeper Talks demonstrations – held throughout the day and across every region at the Columbus Zoo – provide way for guests to learn more about an animal’s care at the Zoo as well as that species’ status in the wild. The Polar Frontier bears are featured in the 2016 summer series with a keeper talk at 10:30 a.m.

The 2016 Keeper Talks are scheduled to be held daily May 1-Sept. 5 and on weekends from March 26-April 30 and Sept. 6-Oct. 31. Schedules are subject to change depending on the weather.

POLAR GRILLE
Donatos pizza, salads and sides are sold at a walk-up window. Picnic seating is available nearby.

TRAM
Free transportation from the Zoo’s entrance to the Polar Frontier entrance is available during the peak Zoo season.

SPECIAL UPDATES

NORA THE POLAR BEAR CUB IS BORN
One of the two female polar bears at Polar Frontier gave birth on Nov. 6, 2015 to the cub who would later become known as Nora. This birth was celebrated at the Columbus Zoo and around the globe as a rare and special event, as polar bear cubs have one of the lowest reproductive rates of any mammal, both at zoos and in the wild.

Two cubs were born that night, but one died shortly after birth. While the mother initially provided care to the surviving cub, her attention eventually waned and keepers decided to intervene. The cub was placed in the Intensive Care Unit at the Zoo’s animal hospital and received 24-hour care from that point forward. Fans eagerly watched as the Zoo shared video and photo updates online.

The public was invited to help choose the cub’s name through an online poll that began Jan. 19. People from around the world could select from four names selected by Zoo staff – Nora was a combination of her parents’ names: father Nanuq and mother Aurora. (The other options were Desna, meaning “boss;” Kaya, “little but wise;” and Sakari, “sweet.”) Nora’s name was announced Feb. 5, 2016.

The cub has been healthy and growing steadily ever since.

THE DESIGN
Many partners helped make the Columbus Zoo’s Polar Frontier dreams come true. This $20-million experience was made possible by the generosity of Franklin County residents and funds raised through a county property tax levy as well as corporate and private contributions.

The focal point of the region is the polar bear habitat, which consists of a 1.32-acre yard with two pools, including one that holds 167,000 gallons and can accommodate salt water. The pool temperature stays between 55 and 65 degrees year-round, thanks to underground geothermal tanks. The polar bears also enjoy a freshwater pool and a habitat that includes dig pits, smell ports, and deadfall trees that provide enrichment.

Nationwide Insurance helped the Zoo create the ultimate polar bear yard as well as the Polar Playground, and the David C. Goss Family sponsored the underwater viewing gallery. The Arctic fox habitat was sponsored by the Ed and Ellen Klopfer family.

CONSERVATION AND SUSTAINABILITY

POLAR BEARS INTERNATIONAL (PBI)
The Columbus Zoo provides financial support to Polar Bears International (PBI) including the work of Dr. Tom Smith, a polar bear maternal den expert, and Dr. Steven Amstrup, whose research includes a bear census.
POLAR BEAR SPECIES SURVIVAL PLAN
Columbus Zoo and Aquarium is an accredited member of the Association of Zoos and Aquariums (AZA), and designed Polar Frontier so that it could participate in the AZA’s Species Survival Plan (SSP) breeding program for polar bears. In addition to the dynamic and enriching animal habitats that are within public view, Polar Frontier also includes a behind-the-scenes maternity yard and denning shelter. The denning shelter were utilized when Nora was born, and the maternity yard provided a safe space for Nora to become familiar with an outdoor habitat before being introduced to the entire polar bear yard and adult-size pool.

The excitement of housing a facility that allowed for the successful birth of a polar bear cub was underscored by evidence of declining wild polar bear populations.

GREEN DESIGN
Sustainability and reducing the Zoo’s carbon footprint was a major goal in designing Polar Frontier. In that effort, the Zoo installed a geothermal heating and cooling system, which uses the earth as an energy source. This system is used to regulate the temperatures of buildings, including the Battelle Ice Bear Outpost, as well as the bear pools.

The Zoo has saved water by installing Life Support Systems in the buildings, which allow water to be filtered and reused.

The Zoo reused and repurposed materials whenever possible. The Outpost was developed from a pre-existing building, and many reclaimed items donated by staff and volunteers were used to decorate the area. For the playground’s surface, recycled rubber mulch and substrate were used.

Additionally, the Zoo planted more than 700 trees and shrubs in the region.

HISTORY

2010: Polar Frontier opens to the public on Thursday, May 6. The region’s animals included two polar bear sisters and four arctic foxes, all of whom had arrived in February.

2004: Brown bear brothers, Brutus and Buckeye, arrive at the Columbus Zoo as cubs, after they were found orphaned in Alaska.

2012: Male polar bear Nanuq arrives at the Columbus Zoo in October.

2014: The Zoo announces the birth and loss of two polar bear newborn cubs. Aurora had given birth Dec. 20 after mating with Nanuq; the pairing was recommended as part of the Association of Zoos and Aquarium’s Species Protection Plan.

2015: Two polar bears are born in November; one cub survives. The cub is named Nora in February, following a public online poll.

THE ANIMALS

POLAR BEARS
Polar bear (Ursus maritimus)
Region: United States (Alaska), Canada, Russia, Denmark (Greenland) and Norway
Habitat: Arctic sea ice, islands and continental coastlines
Diet in the wild: Primarily seals, but also walrus, beluga, birds, fish, vegetation, kelp
Size: Males are 8 to 10 feet and weigh 775 to 1,500 pounds; females are 6 to 8 feet and weigh 350 to 550 pounds
Babies: Mating season extends from late March through May and gestation lasts about eight months with delayed implantation. A litter typically consists of two cubs; the survival rate of a cub surviving its first year is very low.
Conservation status: Vulnerable
Interesting facts:
- The polar bear is one of the largest predators in the world.
- The polar bear is highly dependent on pack ice in the arctic region, as it spends much of its time on the ice hunting, mating and denning.
- Unlike the brown bear, non-breeding females and males do not hibernate or den in the winter.
- The polar bear’s fur ranges in color from pure white after a molt to a yellowish shade resulting from solar oxidation or staining by oil from seal blubber.
At the Columbus Zoo:
Three adult polar bears, male Nanuq and twin sisters Aurora and Anana, reside at Polar Frontier, as well as one cub, Nora. Nora was born to Nanuq and Aurora in 2015, but spent her first months behind the scenes at the Zoo’s Intensive Care Unit after her mother stopped providing care.
**Brown bear (Ursus arctos)**

**Region:** North America, Europe and Asia  
**Habitat:** Alpine tundra and high mountains, sub-alpine forests, alpine meadows, or along coastlines  
**Diet in the wild:** A variety of grasses, herbs, roots, berries, nuts as well as fish, mammals and insects  
**Size:** three to four feet at the shoulders; males weigh an average of 700 pounds and females an average of 450 pounds  
**Babies:** Brown bears are solitary animals except during breeding season, and mate every two to three years. Mating season extends from May to July, with delayed implantation occurring in October or November. Litters are typically born between January and March, and consist of usually one to two but sometimes four cubs. Cubs are born blind, hairless and typically weigh less than a pound.  
**Conservation status:** Least concern  
**Interesting facts:**  
- The brown bear is one of the world’s most widely distributed terrestrial mammals.  
- A brown bear’s diet of 23,000 calories a day would equal 67 cheeseburgers.  
- Because they have access to a consistent food supply, brown bears living at the Zoo do not need to hibernate  

**At the Columbus Zoo:**  
“Brutus” and “Buckeye” came to the Columbus Zoo in 2004 after they were found in Alaska. Their mother charged an Anchorage resident and was shot, leaving the orphaned cubs. Alaska Fish and Game, along with the resident, noticed she was nursing cubs and searched for them the next morning. Both were located, but only one of the cubs was taken in that day; the other was found 15 days later and reunited with his brother at the Anchorage Zoo, before they were transferred to Columbus.
Arctic fox (Vulpes lagopus)

**Region:** Circumpolar distribution in all arctic tundra habitats north and above the treeline in North America, Eurasia, northern Greenland.

**Habitat:** Arctic tundra and alpine tundra

**Diet in the wild:** Small mammals, birds, eggs, crab, fish, insects, fruits, seeds, human refuse, and scavenge the kills of other predatory animals

**Size:** 18 to 26 inches from head to body, and another 10 to 16 inches when including the tail; shoulder height is 10 to 12 inches; weight is 6.5 to 12 pounds

**Babies:** Mating typically occurs from early March to April with a gestation period of 52 days. Pairs have a litter of six or seven kits in the early summer and raise the young in a den. The young emerge from the den after about three weeks and begin accompanying their parents on hunting trips at eight weeks. Males disperse after about six months and young females may stay with the parents to help raise the next litter.

**Conservation status:** Least concern

**Interesting facts:**
- The arctic fox’s fur is seasonally dimorphic; it is all white in the winter and changes to a gray-brown in the summer.

**At the Columbus Zoo:**
The Arctic fox habitat is home to Ice and his sister, Anana, as well as brothers Cassius and Brutus.

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Home to more than 10,000 animals representing over 600 species from around the globe, the Columbus Zoo and Aquarium leads and inspires by connecting people and wildlife. The Zoo complex is a recreational and education destination that includes the 22-acre Zoomezei Bay water park and 18-hole Safari Golf Course. The Columbus Zoo and Aquarium also operates the Wilds, a 10,000-acre conservation center and safari park located in southeastern Ohio. The Zoo is a regional attraction with global impact; annually contributing more than $4 million of privately raised funds to support conservation projects worldwide. A 501(c)(3) nonprofit organization, the Columbus Zoo has earned Charity Navigator’s prestigious 4-star rating.