



News Release

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Minnesota Zoo announces record-breaking participation numbers for its 2022-23 STEM program for students

ZOOMS STEM Design Challenge helps students broaden their creativity, math, science and engineering skills with exhibition

APPLE VALLEY, Minn. – For the ninth year, the Minnesota Zoo is teaming up with Flint Hills Resources to engage with students to develop solutions to real situations faced by zookeepers and staff. The [ZOOMS STEM Design Challenge](#) started in 2014 with just 25 teachers. This year, more than 120 teachers and 5,000 students from four states and two continents will participate in the award-winning program. The animal selected for this record-breaking year is the [Malayan tapir](#). Using STEM concepts, students will work in groups to design models of a renovated exhibit for these endangered, nocturnal and highly tactile mammals.

The ZOOMS STEM Design Challenge, presented by Flint Hills Resources, is a yearlong project that challenges elementary, middle and high school students from across Minnesota to develop solutions for real zoo-based scenarios. Students broaden their creativity, math, science and engineering skills and share their ideas in a final presentation. In March, select student teams will present their projects to a panel of judges comprised of staff from the Zoo, engineers from Flint Hills Resources and other STEM professionals. Top student teams will win prizes for conservation, innovation, teamwork and other zookeeper categories.

“We are looking forward to partnering with Flint Hills for another phenomenal ZOOMS STEM Design Challenge with a new group of talented and creative student problem-solvers,” said John Frawley, director of the Minnesota Zoo and president of the Minnesota Zoo Foundation. “From building an animal habitat to determining the dietary and enrichment needs for each individual animal, STEM is everywhere at the Zoo. This program helps our next generation envision STEM careers that involve caring for animals and working to support wildlife conservation.”

The Malayan tapir is an endangered mammal that grows between 5-7 feet and 500-600 pounds. It’s estimated there are approximately 3,000 Malayan tapirs remaining in the wild. The Minnesota Zoo has supported tapir conservation through global symposiums on wild tapir conservation and by participating in the Malayan tapir Species Survival Plan (SSP). Since 1985, nine Malayan tapirs have been born at the Minnesota Zoo, with three currently in the Zoo’s care.

The challenge will have students engineer innovative enrichment and design solutions that help keep the Malayan tapirs engaged and curious both on and off exhibit spaces, while also encouraging natural behaviors such as swimming and foraging with their prehensile trunk. Students will be evaluated for their research skills, uniqueness of ideas, plans for the solution implementation and overall presentation.

“There is something delightful and creative about intersecting real-world experience and STEM learning with a beloved endangered species at a world-class zoo,” said Heather Rein, director of community affairs at Flint Hills Resources Pine Bend refinery. “We are thrilled that a record number of teachers and students are participating in this year’s challenge. As an employer of hundreds of STEM professionals, programs like this provide optimism for the next generation of scientists and engineers.”

The ZOOMS STEM Design Challenge is made possible by a partnership between the Minnesota Zoo and Flint Hills Resources, which started in 1989. The Minnesota Zoo has received top honors from the Association of Zoos and Aquariums for the ZOOMS education program. This year the program has attracted an international participant, as a classroom from Australia will participate virtually. For more information visit MNZoo.org/ZOOMS-STEM-Challenge.

About the Minnesota Zoo

The Minnesota Zoo is a year-round destination providing a window into the natural world. With hundreds of species of animals, worldwide conservation efforts, and acres of scenic beauty, the Zoo is a resource to connect people, animals and the natural world to save wildlife. For more information visit mnzoo.org. The Minnesota Zoo is an accredited member of the Association of Zoos and Aquariums (AZA) and an institutional member of the World Association of Zoos and Aquariums (WAZA).

About Flint Hills Resources Pine Bend refinery

The Flint Hills Resources Pine Bend refinery produces transportation fuels used throughout the Midwest, including most of Minnesota’s gasoline, diesel fuel, jet fuel, as well as other products people rely on such as propane and asphalt. Located 17 miles southeast of Minneapolis, Pine Bend has a refining capacity of 375,000 barrels per day and is among the most efficient and safest oil refineries in the country. Flint Hills Resources directly and indirectly supports more than 4,000 Minnesota jobs and has invested nearly \$1.7 billion in upgrades and improvements to its Minnesota facilities since 2010. With 1,000 full-time employees, the Flint Hills Resources Pine Bend refinery is one of the largest employers in Dakota County. More information about the Pine Bend refinery is available at PineBendRefinery.com.

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