

Butterfly Pavilion and Colorado State University form groundbreaking partnership to battle “Invertebrate Apocalypse”

Westminster and Fort Collins, Colo., Feb. 27, 2024 – With habitat loss and climate change threatening invertebrates – animals without backbones who form the essential foundation for every ecosystem on the planet – Butterfly Pavilion and Colorado State University announced a formal agreement to create a partnership to benefit entomology, as well as human and ecosystem well-being.

The partnership will see Butterfly Pavilion work with three of CSU's colleges: Agricultural Sciences, Natural Sciences, and the Warner College of Natural Resources to increase research, conservation and management of invertebrate species, engage and provide opportunities for aspiring biologists, ecologists, agriculturalists and conservationists working globally, and connect that work to the public, creating more awareness and support for invertebrates.

“Butterfly Pavilion is delighted to be working collaboratively on this unprecedented partnership pairing an Association of Zoos & Aquariums-accredited invertebrate zoo with a respected academic research partner like CSU to help us find solutions to some of the most pressing research and conservation challenges facing us today,” Butterfly Pavilion CEO Patrick Tennyson said. “Working together, we can move invertebrate research, conservation and education to new heights.”

“CSU is proud to formalize this unique partnership with such an important research and cultural institution,” CSU President Amy Parsons said. “Butterfly Pavilion and CSU have long connected students for internship opportunities and engaged in collaborative research. This partnership will prepare the future workforce, enhance conservation efforts, and elevate our research abilities, which is more important than ever given the critical impact of invertebrates on the food web, agriculture and the environment.”

Invertebrates exist on every continent and in every ocean, making up 97 percent of all animal species. These tiny giants pollinate our crops, recycle waste and decompose dead material, build healthy soil, and improve water quality. They make nutrients available to plants, control pest populations and protect crops. Invertebrate pollinators are responsible for over \$40 billion of agriculture production in Colorado, and a half trillion dollars globally. According to the International Union for Conservation of Nature (IUCN), less than one percent of all known invertebrate species have been adequately evaluated.

“Invertebrates are foundational to entire ecosystems and yet we’re experiencing a global biodiversity crisis brought on by an insect apocalypse,” said Richard P. Reading, Ph.D., Butterfly Pavilion’s vice president of research and conservation. “We don’t have a basic understanding of them, let alone how to conserve them. Through this partnership with CSU, we can have a real impact on invertebrate conservation by identifying and acknowledging them as social, economic and environmental resources.”

Together, Butterfly Pavilion and CSU will improve the quantity and quality of conservation, management and research projects conducted by the partners. They will increase the educational opportunities for students at CSU through internships, jointly conducted research and conservation projects, and conservation education opportunities. The partnership will also create pathways and inspiration for K-12 students to achieve higher education through the colleges within CSU and increase the awareness of the collaborative research and educational work among the public, especially among Butterfly Pavilion guests and stakeholders.

“As a professor and researcher at CSU, I am very excited for this partnership. Butterfly Pavilion does great work and is an amazing venue where CSU entomologists can communicate their research to large audiences. It is also a fabulous place for our students to gain hands-on experience with live invertebrates through volunteering and paid internships. I look forward to working on initiatives that will strengthen both our entomology program at CSU and offerings at Butterfly Pavilion,” said Marek Borowiec, CSU assistant professor of Agricultural Biology.

“In this groundbreaking partnership between CSU and Butterfly Pavilion, we're unlocking a world of boundless opportunities for both current and future students,” said Shartrina White, Butterfly Pavilion’s vice president of Education. “Together, we're not merely pushing the boundaries of invertebrate research, conservation, and education – we're igniting a spark of inspiration that will fuel future generations. By championing the often overlooked yet essential role of invertebrates, we're empowering students to become pioneers in understanding and safeguarding these vital species, making a lasting impact on the world.”

About Butterfly Pavilion

Butterfly Pavilion has been part of the Colorado community since 1995 and is the first Association of Zoos and Aquariums (AZA)-accredited, stand-alone, non-profit invertebrate zoo in the world, currently occupying a 34,000-square foot facility situated on an 11-acre campus provided by the City of Westminster, Colorado. Butterfly Pavilion’s mission is to foster an appreciation of invertebrates by educating the public about the need to protect and care for threatened habitats globally, while conducting research for solutions in invertebrate conservation.

About CSU Research

Colorado State University, a Carnegie R1 institution, reached \$498.1 million in sponsored project expenditures in 2023, representing a 62% funding increase in the last decade and expanded impact and discovery across all eight colleges. With more than 100 research centers and institutes, the university is breaking barriers and collaborating to solve society's greatest challenges.