

Team 6855B Warrior Vex IQ: Robotics Today, Zoology Tomorrow

We are Khloe, Jewels, Christine, and Paulina, also known as Team 6855B Warrior Vex IQ! We are 4th graders at Westminster Christian School in Palmetto Bay, Florida. Today, we are taking you on an adventure to World Wonder to meet one of our favorite zoologists! After school, we meet as a robotics team to prepare for our season.



Christine







Jewels





Photo Source: https://www.wcsmiami.org/academics/preschoolel ementary/worldwonder/nature-center

Mr. Heetderks teaches 23 classes each week to preschool through fifth grade students. He teaches them about animals and their habitats and behaviors.

What is World Wonder?

It is a fun place to learn about animals and nature with our favorite zoologist, Mr. Heetderks!

Mr. Heetderks is a zoologist because, according to The Balance Careers, zoologists study animals and their behavior. He studies animals in their ecosystems in the Wild Acre. The Wild Acre has several ecosystems including a pond, a bird aviary, and a tortoise enclosure. Mr. Heetderks has 23 classes each week teaching students about the study of animals. Did you know that Mr. Heetderks wanted to be a pediatrician when he was little, but he realized it was too much math for him? Instead he found a career working with animals. He analyzes life cycles of the animals, teaches others about animals and conservation, and he interacts with other zoologists to continue his learning.

Photo Source: https://www.wcsmiami.org/academics/pr eschoolelementary/worldwonder/nature-center



https://www.wcsmiami.org/academics/preschoolelementary/worldwonder#

Mr. Heetderks is our favorite zoologist!

Steve Irwin was a famous "Crocodile Hunter!"

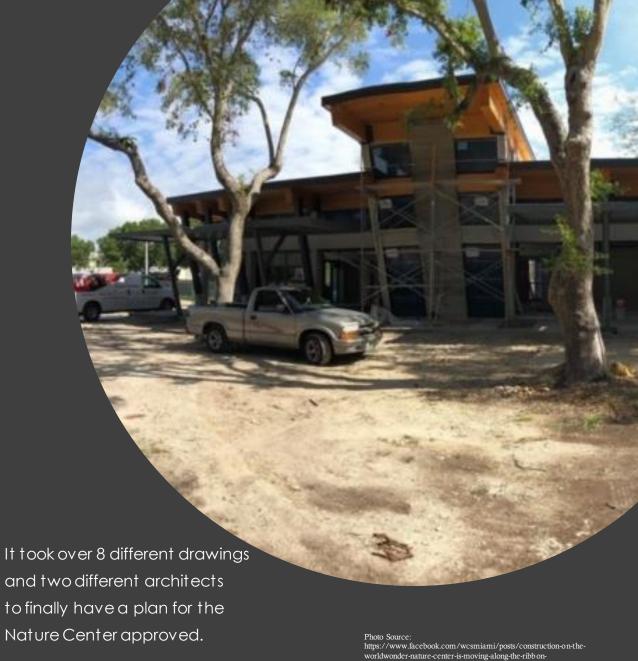
Mr. Heetderks reminds us of Steve Irwin! Steve Irwin loved to learn about and care for animals! According to Australia Zoo, he would work long hours taking care of Queensland Reptile and Fauna Park and caring for the animals. Mr. Heetderks is always seen caring for the animals and taking care of the Wild Acre and Nature Center. Steve Irwin loved animals from the time he was a child. Mr. Heetderks knew he loved animals when he was a boy growing up in Michigan. He loved watching the monarch butterflies on the milkweed plants.

Photo Source: https://www.australiazoo.com.au/about-us/the-irwins/steve/

It is our favorite day of the week because we get to go to World Wonder!

Come along with us!

This Nature Center did not come together easily. Mr. Heetderks had to go through many design processes. The original architect gave him 8 drawings that Mr. Heetderks did not approve. The architect said, "I quit!" Mr. Heetderks did not give up until he found someone who could draw the plans he wanted and get it built. Now we get to go to class weekly in the Nature Center. At first Mr. Heetderks was worried that he did not know enough about animals to keep teaching each week. The principal of Westminster told him, "The world is full of things to learn!" So he keeps learning and teaching!



As we walk through the Wild Acre, we notice the bird aviary. Mr. Heetderks told us a story about his original plan for it. He wanted students to be able to walk into the aviary, feed the birds, and interact with them. That plan had to change when the Director of the Miami Zoo told him that it was the worst idea the zoo ever did. The birds got sick from so many people feeding them. No one could keep track of how much food they ate. Birds also got sick from all the people that came in the aviary. Although he was disappointed that he could not have this feature in the Wild Acre, he was open to the feedback of someone with experience. He can listen and learn from an expert even if it means his idea does not happen.

Thanks Mr. Heetderks for a fun day!



The Tortoise enclosure has thick logs for people to fit between but does not allow the tortoises to escape.



https://www.wcsmiami.org/academics/preschoolel ementary/worldwonder/nature-center

After school, Team 6855B meets for Robotics! Today we are practicing driving our robot to see how many points we can score. One problem we are facing today is that the arm is not tall enough stack all three risers. We had an idea for a robot, but it is not working how we pictured it. We thought about Mr. Heetderks and how the original plans for World Wonder did not look how he pictured it. Instead of accepting something that was not the best option, he never gave up. He found the right plans! We also need to make changes to our robot until it works like we want.

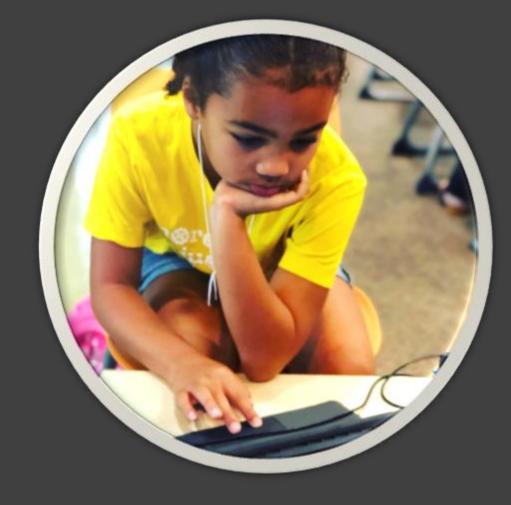


Jewels is fixing the robot after it got stuck!

Jewels working on programming when the robot knocked down the risers



We are also struggling with the robot knocking down risers that we stacked. Mrs. Pastrana, one of our coaches, gave us an idea to make the robot smaller to move around without knocking down the work we already did. We like the idea we had already, but Mrs. Pastrana has more experience, so we are open to her feedback, just like Mr. Heetderks was open to the feedback from an expert in his field. He gave up something he really wanted because he knew it was not a good idea. Sometimes we have to give up an idea we like to make it better.



Christine checking the programming for mistakes

As we ended our Robotics meeting, we realized how many skills we are practicing in Robotics that are preparing us for a STEM career as a zoologist. We have to problem solve, work as a team, go through several design ideas, and be open to feedback. Mr. Heetderks had to present his ideas to others to fulfill his dream of building the Nature Center and the Wild Acre. We must present our work in a journal and during interviews for Robotics competitions. Zoology will change over the next ten years because when a person works in a STEM field, they are always taking chances and thinking outside the box. These people become world changers. With technology, zoologists are making new discoveries faster and faster. They are using actual robots to work with animals. Since we all LOVE animals and we are working together on our Robotics team, maybe one day we will all work together as zoologists!



Jane Goodall is a famous female zoologist! She received a stuffed chimpanzee When she was a girl and named it Jubilee.

Photo source

https://news.wjct.org/post/we-are-part-animal-kingdom-renowned-primatologist-dr-jane-goodall-speaks-south-florida

Robotics Today, Zoology Tomorrow

By 6855B Warriors Vex IQ

Team Members:
Khloe Fedee
Christine Gordon
Jewels Hilliard
Paulina Macias

Bibliography

Bean-Mellinger, Barbara. *Differences Between a Wildlife Biologist & a Zoologist*, Chron, 1 July 2018, work.chron.com/differences-between-wildlife-biologist-zoologist-5712.html.

"Jane Goodall." *Wikipedia*, Wikimedia Foundation, 23 Aug. 2020, en.wikipedia.org/wiki/Jane_Goodall#Gary_Larson_cartoon_incident.

Kramer, Mary Hope. "Zoologist Job Description: Salary, Skills, & More." The Balance Careers, Dot dash Publishing Company, 24 May 2019, www.thebalancecareers.com/zoologist-career-description-125939.

Remington, Chris. "We Are Part Of The Animal Kingdom': Renowned Primatologist Dr. Jane Goodall Speaks in South Florida." WJCTNEWS, news.wjct.org/post/we-are-part-animal-kingdom-renowned-primatologist-dr-jane-goodall-speaks-south-florida.

"Robots to the Rhino Rescue." *UC San Diego Jacobs School of Engineering,* jacobsschool.ucsd.edu/news/news_releases/release.sfe?id=2772.

Shaffer, Suzanne. "STEM Majors for Students Who Want to Work with Animals." *TeenLife Media,* TeenLife Media, LLC, 8 July 2019, www.teenlife.com/blogs/stem-majors-work-animals.

"Steve Irwin-The Crocodile Hunter." Australia Zoo, <u>www.australiazoo.com.au/about-us/the-irwins/steve/</u>.

"Westminster Christian School." Construction on the WorldWonder Nature... - Westminster Christian School, https://www.facebook.com/wcsmiami/posts/construction-on-the-worldwonder-nature-center-is-moving-along-the-ribbon-cutting/10157135725850281/.

"What Is a Zoologist?" EnvironmentalScience.org, 2020, www.environmentalscience.org/career/zoologist.

"WorldWonder at the Nature Center." *Nature Center*, www.wcsmiami.org/academics/preschoolelementary/worldwonder/nature-center.