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TRIP SUMMARY

 On March 13th – 22nd, 2023 students from Mission Secondary School travelled to Costa Rica. The trip focused on biological and environmental sciences and included 27 students who have taken or are taking Life Sciences 11, Earth Sciences 11, Environmental Science 12 or Anatomy & Physiology 12. It also included 3 parents & 4 teacher chaperones: Lindsay Colosie, Erin Koski, Nicole Foster & Jason Lynn.





TORTUGUERO

After arriving in Costa Rica late on March 13th, we travelled toward the eastern coast of Costa Rica on the morning of March 14th. After several hours by bus, followed by over an hour by boat, we arrived in the isolated community of Torteguero. Along the canals, students were able to see many species of birds, lizards, caymans, crocodiles and a troop of howler monkeys. In Torteguero, students got a taste of Costa Rican life in a rural community and also learned about sea turtle conservation at the Caribbean Conservation Cooperation Museum



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LA FORTUNA & ARENAL

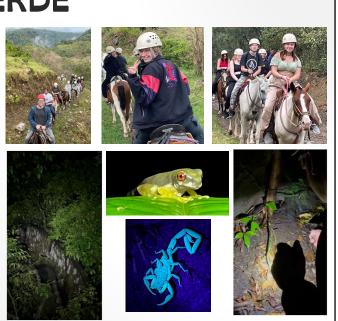
On the morning of March 16th, we loaded back into the boats to travel back to civilization and then travelled by bus to the town of La Fortuna. Here, we learned about the volcanic origins of Central America and were able to see Mount Arenal, the most recently active volcano in Costa Rica, which erupted several times every year up until 2010. In the afternoon, students had the opportunity to go kayaking on Lake Arenal where they were able to see some of the mid-mountain rainforest ecosystem. On the way to the lake, we saw some small mammals related to racoons called coati. In the evening, students relaxed at the Baldi hot springs.





MONTEVERDE

 On March 17th, we travelled by bus to the town of Santa Elena in Monteverde. Upon arriving in Monteverde, we went horseback riding through the mountainous terrain. That evening, some students participated in a night walk through the rainforest where we saw many different species in their natural habitats including sloths, olingos, frogs, tarantulas, scorpions and headlight beetles.



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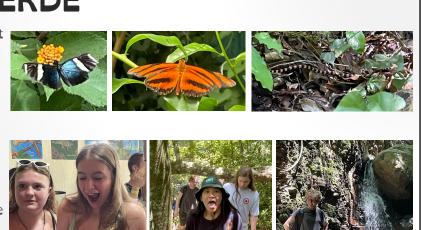
MONTEVERDE

On March 18th, we went ziplining through the cloud forest canopy and then went hiking through the Santa Elena Biological reserve where we saw another distinct cloud forest ecosystem. Later, we planted trees to help with a reforestation effort organized by the local high school.



MONTEVERDE

On March 19th, we went to a local Butterfly garden where we not only got to see all of the beautiful species of butterflies found in Costa Rica but also got to see and learn about other arthropods such as scorpions, tarantulas, millipedes and cockroaches. Lastly, we went hiking through an ecological sanctuary where we hiked to a waterfall, learned about strangler figs and spotted a snake. After that, we travelled by



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SARAPIQUI

On March 20th, we travelled from San Jose by bus to go river rafting on the Sarapiqui River. Before rafting we stopped for lunch at a biological reserve and took a short walk over a suspension bridge. We spotted a poison dart frog along the side of the path. Later, while we were rafting some students saw a sloth along the river bank. Afterwards, we returned to San Jose where we spent our last day. Most students relaxed at the hotel but some took the opportunity to check out the local mall with the tour guide to observe the Costa Rican lifestyle in an urban area.



STUDENT EXPERIENCES

• Each student was asked to prepare a slide to tell you about their experience. They were asked to include three things they remember learning during the trip, what was their favorite part of the trip and to describe how the trip impacted them. The following 23 slides show their responses.

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THINGS I LEARNED

1) Sloths come down once every 2 weeks to go to the bathroom

2) Half the people in Tortuguero are tourists

3) The golden orb spider is used for bullet proof vests

MY FAVORITE PART

The whitewater rafting or just chilling with my new friends

THE IMPACT

I have definitely become more of a grounded person, and it makes me want to live life to the fullest. It has also encouraged me to eat healthier and to eat more fruit. Overall a positive impact on me as a person.



COSTA RICA 2023: EVEE

My trip

Going to costa rica with mission secondary school was something I will never forget. I made many friends and learned so much. I learned about bugs when at the butterfly garden and realized I actually find insects very interesting. I also learned that the world is not as scary as I thought and concurred my fear of bugs (I held a cockroach named timmy and loved it). My favourite part of the trip was the nature in costa rica. Every time I looked outside I was amazed of how much green there was and how there was so many different kinds of plants. My favourite place was the town tortuguero, everyone was so lovely there and I learned to order in spanish there. My favourite activity was ziplinig and going on the tarzan swing. It felt amazing to be in the air and be able to see the mountains 3 things I learned D Rime morthe butterflies have a cus design

- Blue morpho butterflies have a eye design on their wing to confuse predators.
- Epiphytes are organisms that grow on top of plants. One epiphyte are orchids.
 Tarantulas though venomous have never
- 3) larantulas though venomous have never killed a single person in human history.



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SEAN'S COSTA RICA SCHOOL TRIP

Thing I Learned

- 1. San José is the capital of Costa Rica.
- 2. There are two species of sloths that live in Costa Rica. One with 3 toes and one with 2 toes.
- 3. Costa Rica has 7 administrative provinces: Alajuela, Cartago, Guanacaste, Heredia, Limon, Puntarenas & San Jose.

Favourite Part of the Trip

My favourite part of the trip was when we went ziplining through the cloud forest in Monteverde. Where we went along many zip lines very high above the ground.

How the Trip Impacted Me

It was a fun trip that taught me things. I got to travel the world more and spend time in new environments and enjoy the nice Costa Rican weather.



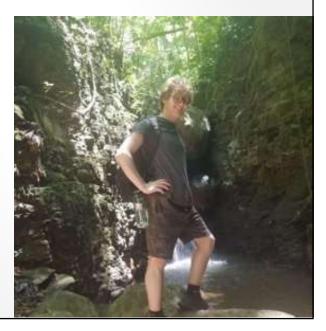


KAEDEN'S TIME DURING THE COSTA RICA TRIP

I learned Gallo Pinto, a beans and rice dish, is served with nearly every meal, Costa rica is home to 3 types of venomous spiders & Costa rica also houses 3 types of venomous snakes.

My favourite part of the trip was Kayaking, followed by Ziplining and Rafting

This trip gave me insight on how to live with less. Often times we tend to get caught up in "I want this" and "I want that", but the area's we stayed in and passed though, there seemed to be just what was needed which was very refreshing for the soul.



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PIPER

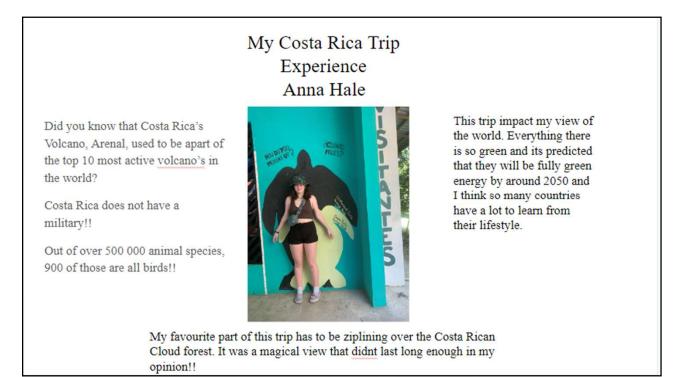
- I learned that the higher you go in Costa Rica, the different the plants are. You can't flush toilet paper in Costa Rica, and banana plants don't have wood stems making them not a tree.
- Ziplining was my favorite part of the trip. This was the longest one I had ever seen, and it is something that I will never forget.
- This trip impacted me because I had to learn to travel without my parents. Being responsible for myself and all of the things I owned helped me prepare for the day when I have to live on my own.

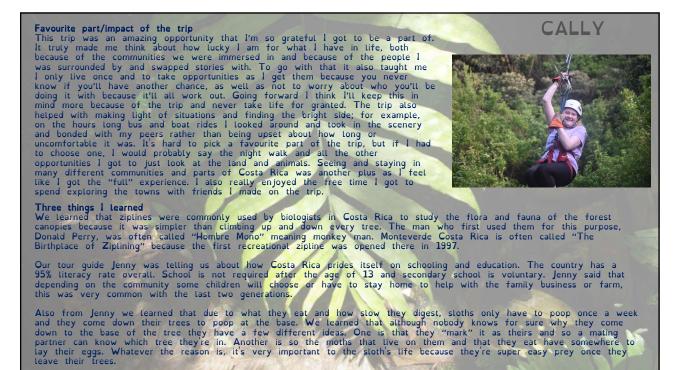
SYDNEY MY COSTA RICA EXPERIENCE

- Three things that I learned from this school trip were: Many of the trees across the Costa Rican rain forest are made up of a parasitic tree, which is sometimes mutualistic, known as the strangler fig. This tree grows on top of other trees, possibly protecting them from outside harm, but still shielding them from the sun. Arenal Volcano, one of the 200 volcanoes in costa rica
- located in La Fortuna, was once dubbed one of the most active volcanos in the world up until 2010 where it fell into a dormant state. When it erupted in 1968, there were three new craters made causing destruction on the western sides of the volcano.
- The rainforests are one of the most important things in Costa Rica for many reasons, but one of the bigger reasons as to why they are so important is the fact that the root system of the vegetation stores much of the water that is used by Costa Ricans, and with all the plants there, Costa Rica produces large amounts of oxygen for the area.
 My favorite part of this trip was going to La Fortuna and seeing the gorgeous view of Arenal Volcano and getting to experience all the beauty of Costa Rica.
 This trip has given me an even greater want to protect the
- experience all the beauty of Costa Rica. This trip has given me an even greater want to protect the forests and ecosystems of our beautiful planet and I feel that everyone around the world should do their part to preserve these amazing places like Costa Rica. If I were ever given the chance to take action and protect even just BC, I would. I love the beautiful places around the world, and I believe that a humans we should be taking more action to preserve them.



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SOPHIA

- On my trip to Costa Rica I learned about their efforts to keep their land/animal habitats untouched and unharmed, the main sources for their income (tourism, coffee, bananas) and that Costa Rica has an amazingly high literacy rate and many great universities!
- My favorite part of the trip was visiting the Baldi Hot springs.
- Going on this trip was such a learning experience for me. It taught me about travelling, independence and perseverance. I'm thankful that I got the opportunity to learn and experience Costa Rican culture. This trip I learned that no country is superior but rather that they each have something special to offer.





How I Improved

LUCAS My Favourity Parts

My favourite part of this trip were the nights I spent outside before curfew where I could listen to the forest, look at the stars and sit and talk with my friends. I loved the communities we went to and the fact that we got to see so many different kinds, such as a small town, small city and a big city communities and that I was able to compare them. My favourite activity of this trip was the Tarzan Swing that we did during ziplining, I love swings and the feeling of weightlessness was amazing.

This trip improved me as a person by helping me conquer my fears of bugs, large bodies of water, and heights. I am amazed of how brave I was, and this trip has given me friendships that I will cherish and also proved to me that I am a capable person that can survive on my own and make friends with people I don't know. This trip was a breath of fresh air and is probably some of the most fun I am ever going to have

What I Learned

1. There is a tree parasite called the "strangler fig" and it starts growing from the top of a tree that is at the canopy so that it grows down towards the ground while already having the light from the canopy, this fig slowly strangles the tree its growing on so that it can have the sun for itself.

2. There are these spiders called "golden silk orb-weaver" that produces a web that is super strong and cannot be broken easily. They use the gene from the spider that produces the web and genetically modifies them into goats so that those goats can than produce stronger wool.

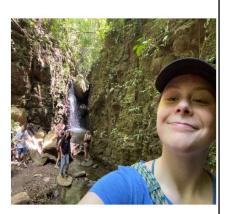
3. There is a type of lizard that can run on water due to its genetically modified feet, these same lizards eat their children and are also called the "jesus lizard" due to its amazing capabilities. They have webbed feet with air bubbles that can help them run on the water.





Costa Rica- Emilie Mowat

This trip was an incredible experience, and I learned so much new information on the trip. Three things I learned on the trip include: that Bark Scorpions are fluorescent, and have cannibalistic tendencies. Mothers carry their children on their backs, and if they're feeling they'll eat their children. I learned how to river raft, and how to navigate a river with others, and the importance of teamwork. Each person has their own part to play, and others are relying on you. This taught me why it's important to put in all your effort into things you care about, because people are relying on you. I also learned about lizards called basilisks, which are able to walk on water, because they have scales under their feet which vibrate, allowing them to create air bubbles which is what they move on. My favourite part of the trip was ziplining, because I loved the view of the mountains as I was riding. The trip had a huge impact on me because I was able to immerse myself in a different culture and language. I was able to connect with other people and make new friends. This trip helped me gain a new love for travelling, and I hope to go to on more like it to learn more about the world around me.



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BETH

MY FAVOURITE PART

The things that I will take with me are the new friends I made and the memories we shared together. As incredible as this trip already was, it wouldn't have been the same without the people I met.

How it impacted me

This trip helped me to branch out of my comfort zone, as I usually don't make friends that easily. I find talking to strangers scary, but I challenged myself and was able to make friendships that will last long after the trip itself

What I learned

- 1. The reason the blue morpho butterfly has such a strange pattern on the underside of its wings is because it resembles an owl eye, scaring off predators that may be hunting it.
- an owl eye, scaring off predators that may be hunting it.
 Costa Rica has a sanctuary that protects millions of turtles, preventing turtle egg poaching and educating people about the dangers facing the turtle population.
- dangers facing the turtle population.
 3. The phrase *Pura Vida*, meaning "Pure Life", is used for almost anything! From "Good morning" to "Thank you" to "You're welcome", this phrase is a huge part of Costa Rican culture.



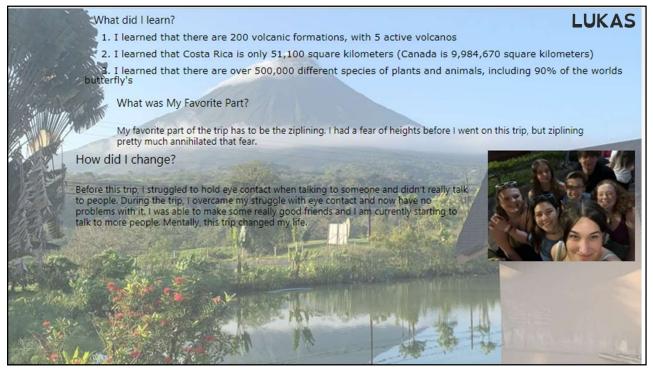


Izzy Things I learnt on the trip

- They use animal structures as garbage cans and they are landmarks for the streets
- There are these birds called diving birds, they dive for fish and the more wet they are the deeper they can go. They need to breath when they come up and their neck looks like a snake.
- · 4 different species of monkeys in Costa Rica
- green basilisks, females have no crests whole males have three diff crests, one on their back, their tale and in the back of their head.
- My favourite part of the trip was when we went white water rafting. White water rafting was an amazing experience for me, I had so much fun! We saw a sloth while on the raft and got to jump off a little hill into the water.
- This experience let me understand biology a little bit more and it definitely helps you with talking to new people and creating new friendships. I recommend going on these trips, it's amazing experience and something you will always remember.



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JAYCIE - COSTA RICA ASSIGNMENT

The impact of this trip

• This trip helped me grow as a person by pushing me out of my comfort zone, because of this I was able to have conversations with people form my school that I would have been to scared to do before.

Things I learned during the trip

- 1. About the Arenal Volcano
- 2. That a specific group of butterflies only likes eating over ripe fruit.
- 3. That male scorpions drop a sperm sac and the female will dance over it which is how they get pregnant.

My favorite part of the trip

• My favorite part of the trip was the tour of the mangrove habitats along the canals of Torteguero.

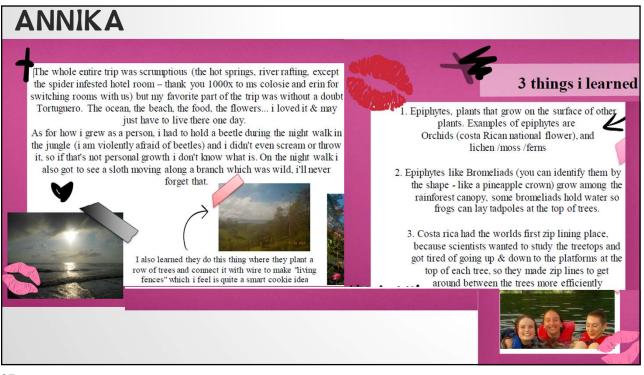


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ANNEKE

I learnt so much on this trip. In the top photo you can see a system called epiphytes, which is where plants grow off of other plants. In these specific ferns, growing off of trees outside of a cafe we went to there was a whole mini-ecosystem. Little insects would make the collected water in the leaves their homes. Dragonflies also had uses for the collected water pools, as they could lay their eggs within them. They would lay two eggs per plant, one fertilized and one that was not. When the fertilized egg hatches, it uses the other egg as protein, feeding off of it until the larvae can go hunting in the water pools. My favourite part of the trip had to be the whitewater rafting, we got to see a two-toed sloth hanging out right above us as we floated by. This trip made me very aware of the culture differences in Costa Rica and gave me a new appreciation for our plumbing system.



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Caiden-Marie

Favourite part

My favourite part of the trip was definitely water rafting, it was a beautiful day out and my guide was super fun and made things enjoyable

How was I impacted

This trip impacted me by showing me that even if we do things differently we aren't doing things wrong, different places use different methods to thrive. A place like Costa Rica has a more environmentally friendly system than we do and it helps them by enticing people to come, they thrive on tourists. Where Canada thrives on our bigger cities and bigger forestry areas. Which is just a long way of saying there are many different ways to be successful



"Unity in diversity"

WHAT I LEARNT

On this trip I learnt quite a few little fun facts about a bunch of animals that live in Costa Rica, things like crocodiles never stop growing, or that sea turtles are like fish and return to the same spot they hatched to lay eggs, and i learnt the telling features between a 2 and 3 toed sloth. I also learnt that Costa Rica is divided into provinces like us (1 always thought it was states)

CHRIS - COSTA RICA TRIP

Three things I learned on the trip were how the green harmony bird will kill bugs and put them on water to attract fish to kill and eat. I learned how zip lining was invented in Costa Rica as a way to go from treetop to treetop quicker when studying how the trees grow. I also learned about the four types of monkeys that are in Costa Rica. My favorite part of the trip was the amazing guide Jenny and how she would teach us ever chance she got but it didn't feel like learning because she made it fun. I also really enjoy white water rafting. Going to Costa Rica changed my perspective on the the way the world works because Costa Rica was so different and diverse but it felt so nice to experience the difference and learn that it may seem different but its not actually to different from Canada.



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Kalyn

What I Learned

- learned a lot about plants and how they grow there. For example tree roots there don't grow down like they do here, instead they grow out across the top of the dirt.
- I learned about the animals they have there.
- I learned a lot about the culture, language, and food.

Favorite Part

• My favorite part was rafting. It was so much fun. The guide was amazing and funny. I saw some animals. And it kept me cool.

How The Trip Impacted Me

• I did know that places can be very different, but this trip got me to experience just how different it can be. It will definitely help me in the future with other trips, with continuing to learn Spanish, as well as many other. All of the things I learned and experienced can apply to other things.



Aya



-My Favourite Part of the trip was Ziplining and Horseback Riding.

-3 things I learned on the trip are sea turtles only spend 1% of their life on land, the Anhinga birds dive into the water to catch fish for food, the more their feathers get wet, the heavier they are which makes it easier for the bird to dive deeper. The Anhinga are also called snakebird because when they swim in the water, they only stick their neck out, since their head and beak are very narrow and long, they appear like a snake.

-This was the first time I ever travelled to a different country without my parents, which made me learn how to be more independent. The trip also surprised me on how beautiful nature can be, the cloud forests were my favourite.

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