



# *Panama Canal & Embera Indigenous People*

## **Essential Questions**

- Why is the Panama Canal considered the Biggest Mega Project in history?
- What is its importance and future of the Panama Canal?
- How the construction of the Panama Canal influenced the Panamanian culture?
- How do the indigenous tribes of Panama benefit from it?
- Is there a possibility of building another Canal in the future?
- Did the construction of the Panama cause any ecological problems?
- What are the wetlands and what is their importance?

## **Description**

Panama is a country on the isthmus linking Central and South America, but how did it happen? A famous feat of human engineering cuts through its center, linking the Atlantic and Pacific oceans to create an essential shipping route, but do we know what was the purpose of building the Panama Canal? What are the uses? How many people were involved in its construction? And what is its future? By talking to locals, experts, and specialists in the topic and engineers and learning about the history of the Canal students will be able to understand and answer these questions. We will also look at the cultural aspect of this beautiful country. By immersing, helping, and talking to locals, students will be able to find out if the Panama Canal has been beneficial to indigenous communities. We will spend a few days with the Embera tribe to learn more about their daily lives. We will wrap up our Seminar by returning to Panama City to process our experience and lead students toward the development of their final presentations.



# And We're Off

By Morgan H. '26  
March 5, 2024

To start off, nobody appreciated having to be at school at 12:30 a.m., but somehow we all survived. The bus ride was cold and quiet, then we were woken up by a bright bus light telling us we arrived at the start of a long travel day at DIA. Both flights were filled with sleep or everyone agreeing on being ready to finally get to hot and humid Panama. Surprisingly enough, after a long night of bus and plane sleep, everyone found some energy and was eager to get to the hotel. Once we got to Panama, we were welcomed with the lovely and very long customs line. But after that havoc (as I'm sure you all know), we finally met our amazing tour guide, Cesar!! He has been amazing and very jolly to us and is making our trip. He has been extremely welcoming and helped to show us what Panamanian culture is all about. Cesar was born and raised here in Panama and seems to know everyone around the city. We're all looking forward to a good night's rest and are anxious to see what tomorrow's adventures bring.



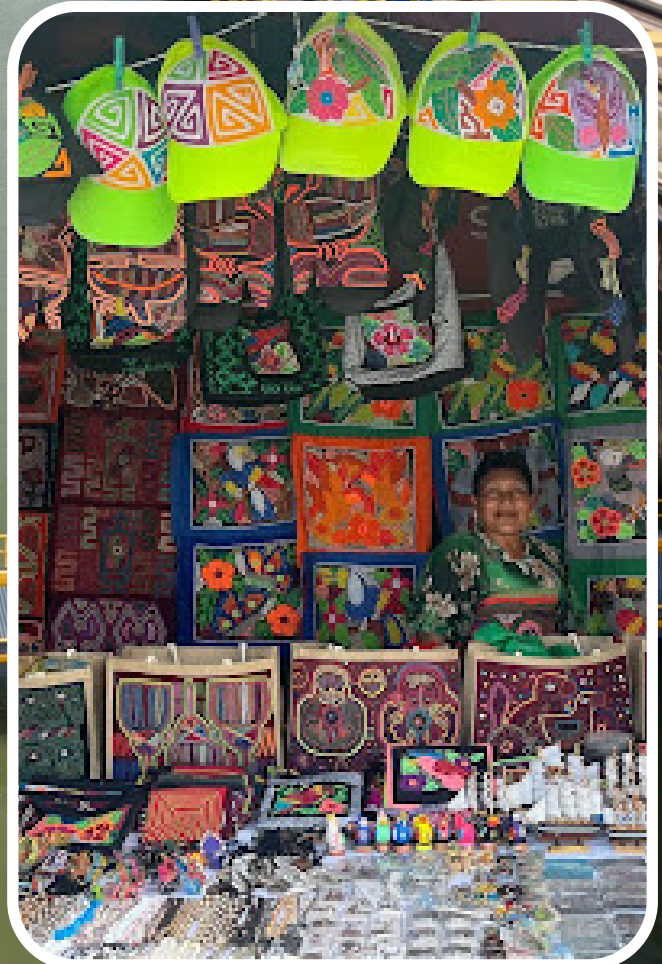


# Panama Viejo & Biomuseum

By Caleb P. '24 & Morgan H. '26  
March 6, 2024

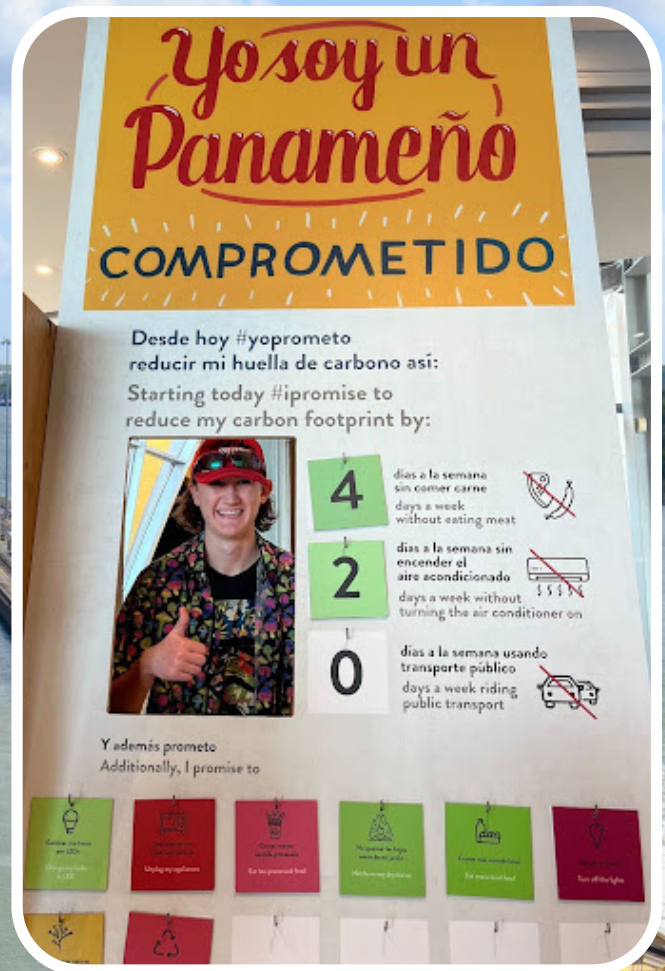
Panama Viejo was incredible! We saw the ruins of an old religious site from the 16th century. As Cesar, our guide, put it, the ruins were “rebuilt” instead of “reconstructed,” meaning they were not repaired with the same materials from their origins. Instead, the reconstruction process began in 2001, where they used hand-made bricks to show not only what parts were lost in the pirate invasion of 1671 led by Captain Henry Morgan, but also to increase the sturdiness of the ruins. Then, we entered a cistern that held fresh water for drinking and farms. We ate mangos from one of the trees after experiencing one of the most beautiful views from the top of the old stone belltower used for lookout when it wasn't ringing. After experiencing the beautiful Panama Viejo, we visited Casco Viejo.

Casco Viejo was full of life and culture. We were dropped off by a wall that overlooked the “Muro de la Ciudad Viejo” (The Presidential Building). We had the great opportunity of seeing Indigenous women from the Kuna's community who showed us their beautiful designs for molas. Molas are a hand-made textile that has beautiful designs of animals, plants, patterns, and more. They are made to be carpets, hung, woven onto women's clothing, or whatever you see fit. The tables were filled with beads, jewelry, and masks, all having vibrant colors that caught your eye. Tables and stores like this were seen all around the city. We visited El Iglesia de San Jose Church's breathtaking altar covered in gold and intricate designs and a diorama of scenes from the Holy Bible. We walked around the town and saw plazas, ruins, and small shops with clothing and delicious food. In 1671, Captain Henry Morgan and his pirate crew burnt down the city. The fire led to almost the whole city being destroyed, but it was later rebuilt and established. Even after being burnt down it is filled with love while embracing its scars and history. We had an amazing time walking the city and learning about the original Panama City.





Finally, we visited the Biomuseum to represent the vast amount of diversity in species in Panama. Though being such a small country, Panama has one of the largest biodiversities in the world! Boasting the first and second largest aquariums in Central America, the Biomuseum was an absolute joy. It had working seismic activity sensors, which we activated with a coordinated jump, and size-accurate statues of many species – past and present – which included a giant sloth! But, we were reminded of the effects humanity has had on the world, with many species going extinct with an increase in temperature, which hurt me to the core. Thus, we ended the activity-filled day knowing the various creatures to look out for further on the trip and the vast history of Panama.





# *El día perfecto para explorar ranitas de colores y estrellas de mar!!!*

**By Mulka B. '24**  
**March 7, 2024**

On today's exciting excursion, we were told to bring sunscreen and pack insect repellent for a day filled with engaging activities. As someone who is truly interested in wildlife, the Tropical Research Institute was a highlight of my day. I saw a wide variety of Panamanian creatures, such as frogs, sloths, sharks, and much more. I found it fascinating that the sloths were quite fast while eating the leaves of the tree and grooming themselves after a long slumber of 18 hours! Though smaller than my hand, the poison dart frogs were definitely easy to see as they each had different spots on their back. The green spotted one was my favorite! As we walked out of the frog exhibit, Cesar, our tour guide, reminded the group to reapply sunscreen. This, of course, meant that we were going on a hike, though no ordinary hike. We played bird bingo! With this game, we explored the institute while keeping a great lookout for some colorful birds. Unfortunately, I did not get a bingo, though I did have the opportunity to see the renowned birds of Panama. With my digital camera in hand, I had to take a picture of the Tropical Kingbird, with its bright blue belly and long gray back striking in the camera lens. With the tour of the institute coming to an end, Caesar had a surprise in mind.

It is no secret that Panama is known for its delightful beaches. Caesar thought best to make a quick stop at the beach and dip our feet in after the captivating experience with the local scientists. My shoes were definitely sandy, but the water was worth it and so were the views. I find it interesting that Panama has a big city while still being surrounded by great beaches and, of course, wonderful wildlife. Our next stop was lunch, and fish sounded like a good option as it is truly fresh from the sea being so close. The Mercado de Pescado (Fish Market) had options I've never tried before. I highly recommend the ceviche. Though a little salty, it was nice to have it with a refreshing pineapple drink. Overall, it was an incredible day and I am looking forward to the days to come.





# *I Spy With My Little Eye a Monkey*

By Katelyn R. '24  
March 7, 2024

We are three days into our trip, and already so much has happened. My absolute favorite part of this adventure so far was our adventure to find some extra friendly faces. Once we were all fat and happy from an amazing lunch from the local fish market, we hopped onto the buses again (which are really nice) to go to one of the common people entrances of the Panama Canal. Getting onto the boat you could just feel the excitement of the groups, because we all knew that we were going to try and see some monkeys! Zooming through Gatun Lake, we saw so much of what we have been learning about when talking about the canal, how the sidelines of the canal were made into steps so that in the excavation nothing would fall over. The main goal of this adventure was to see some of the monkeys that are vital to the ecosystem, so that's what we did. The first island that we stopped at, we struck gold! There were extremely tiny monkeys no larger than your head and very skittish. There are 7 breeds of monkeys native to the Panamanian lands, so we were on a quest to find more. Going from island to island we were having a hard time finding more monkeys, even with some very enthusiastic calls from our guide and Mr. Hillman. We went to 5 different spots before we saw a little white face looking at us and our snacks. We each were holding some grapes flat on our hands just hoping we get close to them. Luckily enough for us, they were not shy and were very willing to take all of our fruit. It was so cool to get up close and personal with all of these creatures. There ended up being 7 monkeys that joined the party. We were excited to see just one, but that was so much more than we could have asked for. It was so cool. Going back to the mainland on the boat was so relaxing with the wind hitting our faces just right, and the waves rocking us back and forth. It could have been a dream.





Getting to experience getting so up close to these animals was such an amazing experience. We learned that they are very important to the ecosystem. Some species eat certain leaves that would overpopulate the small islands, and they also regulate the number of bugs that are in their space. They are a big part of how things go around on the islands in the canal. For a long time, monkeys have been one of my favorite animals and one coming to my hand to grab and accidentally hold my finger for a moment instead of grabbing the fruit was so fun and exciting. Today's adventure is something that I don't see myself forgetting.





# Dress Maker, Dress Maker, Make Me a Dress! And Some Shoes!

By Sofia B. '26  
March 8, 2024

We got up so early today that even our leaders couldn't pretend they weren't tired. We drove to a new town, Chitra, to stay for a few days. The main purpose of the time in Chitras is to experience a different part of Panama and to learn about the traditional crafts that are a big part of Panamanian culture. Our first stop was a tailor shop where we learned about "pollera dresses", the signature dress for special occasions that takes years to make! They showed us all the different techniques to make the dresses, and walked us through the process while showing us examples along the way. After learning from the local artists about the dresses, we went to another place to learn about a different style of art here in Panama, shoe making, specifically leather shoes called "cuturras" that are used in traditional dances, something like tango and tap. They showed us how they make their shoes and how they are different from just sandals. One guy actually made one of the shoes while we watched. We also got to see the masks that they wear during the dancing, and one of the artists there showed us how they perform the traditional dance. It was very cool!

Everything was interesting but reflecting on the day, I was very fascinated by the pollera dress making. Each dress can cost anywhere from \$2,000-\$18,000. There are 6 processes and it takes several people to make one dress over the span of 2 years. 2 years! The dress is all done by hand, and they are kept in the family. They are used for competitions and of course events like festivals and weddings. It's really interesting how traditional the people here are and how much they value doing things the old way. It takes at least 720 threads for one dress to be made and no dress is like another, they are all unique and beautiful, just like the people that wear them.





# Folk Art & Folk Tales in Far Off Chitra

By Emmitt G. '24

March 8, 2024

Today was our first day in Chitre, Panama. After the long drive and visiting the dress and shoe makers we made our way to Enrique's house. Enrique is a Diablico mask maker and a master craftsman. (Diablico masks are these crazy demonic-looking masks that Panamanians use to represent evil in their festivals that honor the perpetual struggle of good against evil. Good always wins, but the evil must be represented.) We watched as Enrique masterfully molded a block of clay into a contorted face. He couldn't make the whole mask with the time we had, but we learned the rest of the process through the examples he had lying around. After they had the clay mold finished, it was lathered in four layers of paper mache. Then the mask was cut apart to separate it from the clay. Once it was separated, the mask was put back together and painted white. Finally, the mask was painted in detail by Enrique or sent off to another artisan to be finished. The finished products were both horrifying and impressive.

Our next stop was a master potter named Hector. As we entered Hector's shanty there was a wave of heat. Hector's kiln was roaring hot and right next to us in the shop. We only had like 15 minutes until the heat would be unbearable. Hector jumped on his wheel, spinning it with his feet and whipped together a pot in a few minutes. Perhaps sensing the presence of another artist, Hector invited our resident artist, Paige H. '24, to take a turn on the wheel. Paige soon found out the clay was much less malleable than we were used to in the U.S. It was like a full-body workout, but they still managed to produce a flower pot, impressing everyone, including Hector. When we left, the kiln was turning red, and it must've been 200 degrees in the house.





We jumped into the bus and headed to our last stop of the day, a specialized drum maker. The drum was called a tambores. The instrument is bigger than a tambourine, smaller than a djembe. He quickly walked us through the detailed process he used to make them. It was a refined and meticulous process that involved a lot of chiseling and hand sanding. He quickly pulled out a drum he made and laid us down a beat. There were only three possible notes on the drum, so he had to be creative. His performance was great, and he invited somebody else to try. My favorite moment was when Chase Y. '25 stepped up and played better than anyone else has, according to the master. We then headed back to the hotel and spent the whole night messing around in the pool. Even dinner, fresh tacos, was served poolside. Nothing is better than a taco bar right next to the pool after a long, full day.





# Two Beauties & the Beast

By Hannah "HanMo" M. '24  
March 9, 2024

Our last night in Chitre was such a blast! A dazzling show, delicious food, and many fond memories. The night began with a buffet-styled Panamanian meal. The dinner consisted of chicken, beef steak, rice, steamed vegetables, mozzarella balls, and sauces such as salsa de cilantro and piccante. Some of my favorites! The delicious dinner was accompanied by a beautiful display of Panamanian culture and tradition in the form of a series of dances by local artists. The show began with a graceful and intricate duet between a man and a woman. The woman was dressed in a stunning pollera, a traditional Panamanian dress. The pollera is still worn today in formal events, traditional festivals, and annual contests. It can take years to make! The man was wearing a traditional Panamanian outfit. His hat stood out as the infamous "Panama Hat" inspired by former president Theodore Roosevelt when he visited the canal construction. The man and woman's dance was graceful and delicate whilst still exciting and passionate. The next dance is known as the "Diablico Dance." The dance is traditional to Panama's culture and is displayed in ceremonies, festivals, and carnivals. It highlights the evil that must be overcome in the world in order for families to survive. The Diablico outfit is a striped suit with a skillfully crafted mask. The mask is beautiful and terrifying. Like a Halloween mask but even more intricate and shocking. The mask itself is carefully made using clay, paper mache, and paint. Attached to the mask is a crown made of Macaw feathers, from the Panamanian Macaw bird which has unique colors and plumage. The Diablico dance was very thrilling with many movements and instrumentals. Overall, the performance was astounding. All three performers -- the woman, the man, and the Diablico





dancer -- did a wonderful job at displaying the Panamanian culture. Each dance was met with loud applause from the class, as everyone saw the beauty and meaning behind the performances.

One thing that I enjoyed was the drive and genuine passion the dancers had. I saw the connection the dancers had with the culture and their personal connection to Panama. The connection the performers had with the Panamanian-specific traditions was so beautiful. Not only did I notice this connection but many of my classmates discussed and raved about the clear bond they had. Overall, I think this dance was not only representative of the culture but of the community. Panama is a place where tradition is respected and celebrated.





# Finally Made it to the Canal!

By Celina K. '24  
March 10, 2024

This day started so early, but the loss of sleep was worth it because today we finally got to see the Panama Canal. It seems like we've been learning about this place for months so it was great to finally see it in person. After a long drive from Chitra, we finally arrived at the Miraflores Lock Center. The center contains a lot of history about the canals, an Imax theater, and of course an amazing observation deck to see the locks in action. I wanted to go see the canal immediately but we had to watch one more documentary about it first. So we got popcorn and headed to the Imax theater. During the show, which was actually pretty cool, we learned things like how the water flow works just by gravity to change the water level to allow ships to travel from one ocean to the other. Also, to build the Canal, after they had figured out the engineering, the real challenge was to keep workers from dying of Yellow Fever. After some research and testing, sure enough, they figured out that it was mosquitos. After they basically annihilated the mosquito population of Panama, workers stayed healthy and the canal came together.

After the show, we went to the observation decks to watch the locks working. It was amazing! Two small cruise ships were already waiting in the locks. People on the cruise ships waived and greeted us. One group was English and the other was from Argentina. We were all talking when suddenly people started to point to a huge cargo ship coming into the lock. We found out that the ship was the Iberian Bulker, a cargo ship from Denmark. The sailors on the bulker waived and said hello too. While we waited for the Bulker to settle, I couldn't help but notice all the other people who had joined





us on the observation deck. There were probably people there from a hundred different countries, all there to see the same thing. Slowly the water level dropped. Then the canal doors opened. This mechanism hasn't changed since the early 1900s and was based on designs made by Leonardo Divinici. With the locks open, all three ships headed toward the Pacific.

Thinking about everything we saw today, what sticks out to me is how what started out as a simple idea to ship cargo faster has evolved into something that does move cargo but also brings people together and makes the world a better place for everyone.





# Scavenger Hunt & Smokey Hike

By Brent M. '26  
March 11, 2024

Today began with the weirdest scavenger hunt at a local market. We were tasked with finding the ingredients and prices for a recipe for a traditional Panamanian dish. We were split into three groups, given an ingredient list, and then sent off to complete our task. We had to ask the vendors there at the market about the ingredients and prices. Luckily, my group got the recipe written down for us instead of having to write down what the lady we asked was saying. It was a little challenging at times because not everyone spoke Spanish that well, but it was still a neat experience because we got to interact with locals and get a better sense of what it's like to shop in Panama. After everyone completed their recipe, we got fresh squeezed juice from one of the vendors at the market. It was pretty good.

After the scavenger hunt/shopping trip, our guide Caesar took us to nature area for a hike. The hike wasn't that long and there was a lot of smoke from some fires burning outside of the city, but when we got to the top, the views were beautiful. We made a short stop at a chocolate shop on the way back to the bus and bought some chocolate that was made locally.

Although the day was shorter than the previous days, it was still a great day. The market gave us a glimpse into a bit more of the typical life here and gave us some more ideas about the different foods Panamanians eat on a daily basis. The hike gave us a good view of the city, even though it was slightly obscured by the smoke. All together, the day was short and sweet.





# *Into the Woods ... More Like a Jungle*

By Hayden D. '25  
March 12, 2024

We were told that today we'd be taking a boat to a village to see an indigenous tribe. And that's definitely what happened but it really misses the highs and lows of the actual experience. We started early. We loaded the bus and started through town on a familiar route, but slowly the landscape changed. The more we gained elevation, the fewer shops and houses we saw. Pretty soon we'd turned off the main road and were winding through a forest that got thicker and thicker. Pretty soon it was just trees and vines and green everywhere. Finally we emerged at a river and the bus was surrounded by the Embera tribesmen wearing their traditional loin cloth and not a whole lot more than that. They guided us to a fleet of dugout canoes. Our leaders seemed as skeptical as the students, but we got into the canoes and away we went to the village. Winding through the jungle, our Embera captains were obviously very capable. Within minutes, we arrived at their village and we got out of the boat and were greeted by even more Embera people playing drums and flutes. We were quickly guided to the "shopping center" of the town where we bought handmade jewelry, masks, and other items. We were then introduced into the village chief, who gave us a brief explanation of how his people had reached Panama, and answered many of our questions. We toured around the village seeing things like their museum, agricultural systems, and school. Lunch was fried tilapia that the Embera had caught the day before, plantains served in a leaf bowl, and a large selection of fresh fruit. We watched displays of traditional songs and dance, and even got the opportunity to join in. A few students got temporary tattoos drawn by members of the tribe. After a full day, we were off back to the city.









# Making a Splash & Celebrating Someone Special

By Sofie M. '24  
March 13, 2024

On the second to last day of our Panama trip, we embarked on a day filled with fun activities. After visiting the museum of the Panama Canal, we canoed around the river in which the Embera people reside. It is here that we swam around, and enjoyed the weather and the water (which us Coloradans are not at all used to). The river was surrounded by tropical forests and filled with various species of animals and fish. Our activities in Panama involving water have been my favorite activities, because, as I have told the group numerous times, I have had a yearning for water and swimming for quite some time now. Many of us relaxed and drifted around the water, allowing the current to take us downstream. I joked that we were swimming with crocodiles, and sure enough, to everyone's dismay, we did actually see a caiman in the water.

After our time in the river, we revisited the community of the Emberas. At the village, we enjoyed a fresh lunch consisting of various fresh fruits, and freshly caught and cooked fish from the river that we had just swam in. After lunch, the Emberas taught us how to weave baskets and make reusable plates from the leaves of a sturdy plant. We then danced with the community and played around with the children there. I was given many flowers by the children, who seemed to be pretty fascinated by my hair and my nose piercing.





On our first day with the Emberas, I won't lie, many of us were quite weary of the whole experience. None of us liked feeling as if we were imposing upon something sacred. However, after learning about their livelihood, we found out that they essentially survive off of tourism. Not only does it keep their very small community from disappearing, but the crafts, jewelry, and art that they make are for sale. I purchased several pieces of jewelry, and it felt nice knowing that my purchases were authentic, and not mass-produced pieces of plastic. Immersing myself in nature, and eating fresh, unprocessed food was also quite refreshing. I think many of us need a day or two where we leave technology behind and simply touch grass and reconnect with nature. Learning and experiencing the culture of the Emberas was a very uplifting experience that was truly once in a lifetime, and although many of us had our concerns, our days spent with the community turned out to be some of our favorite days from the entire trip.

Upon our return to the hotel, we celebrated my 18th birthday with a very delicious cake. I received several birthday wishes, as well as a card from my best friend and a two-dollar bill from Mr. Hillman. He calls it his "lucky two-dollar bill," and I am very grateful that such a charmed piece of currency was bestowed upon me.





# *If Life's a Beach, I Hope it's Not This One*

By Chase Y. '25

March 14, 2025

Starting the last day of our trip was a little bit rough for all of us. We were all sad that the trip was coming to an end, yet we were looking forward to getting home and sleeping in our own beds. After breakfast in the hotel, we loaded up onto the bus and took a short ride to the coast. When we got there, we were met with an entire beach littered with garbage. For about an hour, all of us worked as hard as possible to clean up this beach. First, we picked up plastic, then we picked up styrofoam, toys, and shoes. It was so hot and humid. The sand was oily and smelled like fish and gasoline. At about the halfway point, we took a five-minute break and then we got back at it. After all that work, we had filled up at least 40 bags of trash. At first, it felt like a great accomplishment. But then we looked back at the beach. In every direction, as far as we could see, there were piles of trash. As the tide started to come in, even more trash started to move in. We learned that some of the trash comes from Panama, but even more of it comes from North and South America. The way the currents work, the tides bring trash to the equator and that means the beaches of Panama. It felt like we did nothing. It was discouraging but it really raised my awareness of how big of a problem pollution is.









# The Last Hike

By Imogen M. '24

March 14, 2024

As we were on our way to lunch we took an unexpected stop at what seemed to be a military checkpoint. Confused as we disembarked from the bus without our guide Ceaser and a single water bottle was given to us by our driver Carlos, we realized that we were taking a hike. Already exhausted from our cleaning the beach early that morning we all looked at each other, not wanting to advance. I asked Ceaser how long it was and he said about an hour and fifteen minutes, our hearts sank. (Caesar said he couldn't do this hike because of his asthma, which wasn't encouraging.) Begrudgingly, we started up the road to the trailhead. Then we took a sharp turn to our right and noticed the never-ending rows of stairs ahead of us. As we began our ascent it was easy to see that it was going to take longer than that hour to finish at the pace everyone else was walking. I pushed through the pain in my legs from the long days of hiking that we'd already and running on the treadmill every morning to keep in shape for field hockey. On the stairs, my calves were burning at every step, and came level with the second part of the trail. Heading past some old cones on the road, we traversed two switchbacks and then went straight for a while. Finally, we came across a breathtaking view of the harbor with the BioDiversity Museum shining like a brightly colored beacon in the harbor. A couple minutes later we came across a sloth sleeping on a branch that arced over the pathway, and then a capybara shortly after. Finally, we made it to the top of the mountain. I was exhausted but so happy with the view and the sense of accomplishment.

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