

The 28 Percent

Women make up only 28% of the STEM workforce. This newsletter aims to change that.

By Imani 12th grade



April 2024

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EARTH DAY 2024 LOCAL EVENTS



Going Into The UCLA EAOP Conference

written by Kissia Repalda, JMHS Chapter

First and foremost, the overall experience was excellent! I had a lot of fun meeting and socializing with new people. A lot of people attended the event and the UCLA auditorium was full. I met people with the same interests and hobbies as I am. The event was exciting and courteous. The moment we got to the parking lot the staff was already helping us out. They were all extremely nice. The line of people was really overwhelming because I didn't know what was about to happen but honestly it wasn't as scary as I thought it was going to be. They also served us free breakfast and lunch and it was a good meal. We spent approximately 3 hours at the event as they also explained the possibilities of things that we need to do to be able to attend the college or university of our choice.



In addition to that, they gave the attendees options which are more fitting for us in terms of the education we want in the future. They also explained the benefits of financial aid and how it saved plenty of students in terms of money problems and how we can use it. There were plenty of guest speakers but three of them were the most important, they are going to be our advisors. If we are ever struggling we can just come to them and they can help us because they already had the same experience and know what can do to help us get better. They also came from the same program EAOP and it helped them a lot and they were thankful that this type of program exists to help students be a better version of ourselves. They also taught us how we can manage our time resourcefully and we can balance our time for school and our personal time. I was grateful that they taught us how we can manage our time because I now also use it and it works great! The panel also talked about the hardships they had to face. I admire their dedication to fulfill their dreams to finish college and help their family even if it gets challenging for them. The event also had a performance that they coordinated to show us. It was really fun to watch them dance and represent their culture to the people at the venue. Though the performance wasn't as good my family and I still enjoyed it as they gave their full performance. This experience made me realize that there are programs that can support your needs and support you personally on things that you are struggling to do or accomplish. I love how the student panel talks about loving and adoring your family and those people around you because they can be helpful to you. They used their family as their inspiration which made me look up to them because I also want to do my best for my family especially for my mother. I learned a lot and am expecting to learn much more from these people that are going to guide me through this program.

5 Ways to Celebrate Earth Day in 2024

written by Polly McConnell

On April 22nd, the world will come together to celebrate Earth Day. Earth Day is an annual holiday dedicated to appreciating mother nature and supporting her preservation. With citizens celebrating from across 193 countries, it's one of the few universal holidays.

If you're anything like me, it's easy to carry guilt about the destruction of this planet that we're all responsible for. And being constantly bombarded with news of rising temperatures, oil drillings, and climate injustice, it's even easier to feel overwhelmed.

To me, taking the month of April to celebrate Earth - to appreciate it, and all of the astonishing systems and beings that it provides a home to - can offer a much-needed break from this stress and guilt. Sometimes, to solve the problem of climate change and global destruction, we must take a step back: taking the time to marvel at mother nature's magic can inspire us to protect her in new ways.

The celebration of planet Earth extends throughout the entire month of April. Here are 5 simple things you can do to celebrate, appreciate, and connect with the Earth this April.



1. Spend some time in nature. Whether it's taking a hike, laying down in the grass, sitting at a park bench, or driving through the mountains, there are an endless number of ways to physically immerse yourself in nature. This can serve as an important reminder that we are one with the planet, and it can open our eyes to the incredible ecosystems that make not only human life - but all life - possible. Not to mention, it's a great way to break away from the computers and textbooks we spend so much time hunched over.

Additionally, hiking, walking, and even just sitting outdoors are all beneficial to physical health, providing us with a fresh supply of oxygen (and a great workout, if you choose to hike)! In the Pasadena area, you will never have to look far - Pasadena provides a wide selection of hikes, ranging in length, difficulty, and terrain. Eaton Canyon (right across the street from Pasadena High) is a popular hike that's flat and steady, complete with a handful of lively streams and a beautiful native landscape. Venture to the top of Bailey Canyon in Sierra Madre, and you'll be provided a stunning view of the whole city in just around twenty minutes! And for something slightly more rigorous, the Dawn Mine trail in Altadena is a longer hike that includes skyline views, native chaparral, and shady paths along the river.

2. Hug a tree. That's right - believe it or not, wrapping your arms around a tree will actually make you happier. When you hug a tree, your body releases a chemical called oxytocin, which is the hormone that we associate with the feeling of love and security (the same chemical is released when we embrace a loved one). Hugging a tree is also capable of reducing your stress levels, blood pressure, and heart rate, as it decreases the amount of cortisol (a stress indicator) in our saliva. Moreover, embracing a tree switches our bodies from the "fight-or-flight" state - known as the sympathetic nervous system - to the "rest-and-digest" state - the parasympathetic nervous system. And, as we shift into this relaxed state, our bodies begin the production of serotonin, the happy hormone.

Aside from the numerous health benefits that can help us relax and reset, hugging a tree can also connect us with other living organisms. Somewhere down the phylogenetic tree, humans and trees were a single species. In fact, paleontologists estimate that we only split off from trees around 1.6 billion years ago... and if the earth is around 4.5 billion years old, that means for the other 2.9 billion - the vast majority of time - we were one with the trees. Today, we still share 50% of our DNA with them. These leafy beings are our relatives - and when we hug them, we can remember this connection.

3. Commit to a zero-waste month. The theme of this year's Earth Day is "Planet vs. Plastics"! To take part in the 2024 challenge, choose one area of your life and vow to cut plastic out of it for the month of April. Some examples include using a reusable water bottle instead of disposable plastic ones, using no plastic straws, no plastic takeout bags or plastic snack bags, no contact lenses, no plastic coffee cups... the list goes on! To be clear, combating climate change won't happen on an individual level - it requires a systemic shift away from wastes like plastic; but also, nonrenewable sources of energy like oil and natural gas that our world relies so heavily on. That being said - when consumers demand a shift away from one of these resources, we can direct corporations to larger change! By boycotting plastic sandwich bags at the grocery store, for instance, we can send a message that these products are no longer wanted. The store owners will have no choice but to discontinue their sale, maybe even opting for a more sustainable product over time. Additionally, cutting plastic out of our lives for a month can be a helpful reality check - how much do we rely on this disposable pollutant? These important reflections can guide us in reshaping our lifestyles to be more sustainable in practice.

4. Join Green Club for a garden day! If you like getting your hands dirty, there's no better way to do it than dig them into the soil. Aside from its campus-wide recycling duties, Pasadena High's Green Club hosts garden days at our school at least once a month. Garden days are held in the school's garden, located right next to the Little Theater and the East Quad. As someone who's been going to the garden for a while, I'm always excited to go back because of the friends that I make while helping these plants grow. Getting your hands dirty alongside others to create a thriving garden is a bit of a "we're-all-in-this-together" situation - but at the end of every day, the garden is left better than we found it. Over time, you'll see the seeds that you put in the earth with your own hands start to become cucumbers and tomatoes - and it's a wonderful feeling. Most of all, garden days are an easy way to connect with people who you might not otherwise know. You can also receive service hours for your participation!

5. Donate to an environmental cause. There's no shortage of nonprofit organizations that focus on environmental causes across the world. The majority of these organizations get their funding solely from donations. If you're able, putting your money towards one of these groups can be a quick, direct way to support the earth. What I'd recommend is researching groups that address a specific cause that you care about. Otherwise, some common nonprofits include World Wildlife Fund, the Sierra Club, or Greenpeace. Even donating a small amount can go a long way for these organizations, and through them, for the planet.

Endangered Species Spotlight: Golden Lion Tamarin

written by Kaley Simkins

The golden lion tamarin is one of four tamarin species, and it can be identified by its voluminous, fiery mane that resembles one of a lion. The petite primate is native to the Atlantic coastal regions of Southeastern Brazil and occupies the forest canopies, which are 29-100 feet off the ground. Their long fingers benefit their omnivorous diets, allowing them to effectively search and capture insects and small invertebrates in tree crevices. Their food is shared within their families of 2-8 members, which typically consist of one breeding pair and a couple of litters of young. A single litter will most likely consist of twins, where the mother will primarily nurse and the father will take the initiative in raising the infants.

The social nature of the golden lion tamarin is crucial to their survival since 50% of young die in the first year of life; they rely on their family members to protect the infants and provide nutrients for them. These animals are playful, meaning they love to wrestle and chase each other through the trees. Moreover, the primates are territorial and defend their habitat with scent markings or vocal signals. The average golden lion tamarin may live up to 15 years in the wild and has the potential to survive up to 25 years in captivity. While the population is currently stable, the primates are listed as an endangered species with 1,400 individuals remaining.

A large contributor to the original decline of the golden lion tamarin population was the yellow fever epidemic in 2018. Once the disease hit Southeastern Brazil, the population of the small monkeys reduced from 3,600 to 2,500. Since then, the fragmentation of their forest habitat has been the greatest threat to their survival. The expansion of the logging and agricultural industries in the rainforest has reduced their habitat to 2% of the original area, meaning the patches of forest the tamarins still have access to are way too small to support a healthy population.

A Brazilian non-profit, AMLD, has defended the Golden Lion Tamarin since 1992. The organization coordinates numerous efforts to save the species and protect the rainforest it inhabits, such as restoring forest corridors that connect isolated patches of the biome and working with the Brazilian government to federally protect Brazil's rainforest. AMLD has successfully restored 1,226 acres since 1997 and has vaccinated 448 golden lion tamarins from yellow fever. Save the Golden Lion Tamarin, a U.S.-based organization, is providing financial and technical support to AMLD. Together, the two non-profits aim to secure 62,000 acres of connected and protected forest in Rio De Janeiro for 2,000 individuals to inhabit to maintain one viable golden lion tamarin population.



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