# HILDENE • 8TH GRADE LINCOLN ESSAY COMPETITION WINNING FIRST PLACE ESSAYS, 2022

## 2022 PROMPT:

#### What gives YOU hope?

# Identify a challenging issue facing humanity today, whether at the local, state, national, and/or global level.

Express why this issue matters to you.

Investigate a scientific, legislative, technological, or other type of solution that is currently being proposed or employed to address the issue.

Explain what it is and why it holds promise as part of the solution to the problem.

#### Inspiration:

"We can succeed only by concert. It is not 'can any of us imagine better?' but, 'can we all do better?' The dogmas of the quiet past are inadequate to the stormy present. The occasion is piled high with difficulty, and we must rise with the occasion. As our case is new, so we must think anew, and act anew."

- 1862 Second Annual Message to Congress, President Abraham Lincoln

In his speech to Congress, President Lincoln was rallying Americans to save the Union by supporting his plans on many initiatives—freeing those enslaved, being foremost among them. His impassioned plea to come together to make bold choices could as easily be asked of all people today. The purpose of this year's prompt is to invite you to examine ways in which people are "rising to the occasion" today in response to any number of challenging issues.

> PLEASE NOTE: Essays have been reprinted as submitted without grammatical and/or spelling corrections.

Hadley Reed, 1st Place, Region 1, Green Mountain Valley School

#### Saving Our Seas with Social Media

By 2050, there will be more plastic than fish in our ocean.<sup>1</sup> My generation inherited a massive ocean pollution problem. However, we also inherited a unique tool that we are using to resolve this issue before it becomes irreversible.

Let's face it. We aren't taking care of our planet. Over eight million tons of trash are dumped into our rivers and oceans each year.<sup>2</sup> Trash causes countless problems for our earth beyond ruining the beauty of our beaches. About one million marine animals die from our plastic waste every year.<sup>3</sup> Not only does our plastic pollution kill innocent marine life, but it also harms humans. When plastic enters the sea, it breaks down into microplastics from sun exposure and waves.<sup>4</sup> These microplastics spread throughout the water, are ingested by fish, and eventually move from the fish's stomach into its muscles - the part we eat. Human ingestion of microplastics can cause severe cell damage and allergic reactions.<sup>5</sup> At the same time, this plastic breakdown process releases toxic chemicals that pollute our ocean.<sup>4</sup>

This issue has its own place in my heart as a competitive sailor who spends hours on the water. I want future generations to enjoy clean oceans that contain healthy marine life.

On October 29, 2021, the #TeamSeas campaign was launched and spread virally across the internet. Started by two YouTube influencers, Mark Rober and MrBeast, TeamSeas is a global fundraiser to clean the ocean. Their pledge is that for every dollar donated, one pound of trash will be removed from the sea. Astonishingly, they reached their goal of collecting 30 million dollars by 2022. TeamSeas splits its earnings between two nonprofit organizations: Ocean Conservancy and The Ocean Cleanup. The campaign has been promoted on various social media platforms, such as YouTube, TikTok, and Instagram. This innovative method of using social media as an advertising platform is a very quick and effective way to raise money.

Removing over 30 million pounds of trash from the ocean is a daunting task, and these two organizations are hard at work. Ocean Conservancy focuses on organizing beach cleanups and removing deadly, abandoned fishing gear from the ocean. The Ocean Cleanup locates heavily polluted rivers and places advanced, sustainable vessels which autonomously remove trash from the water. Collectively, they are hoping to see a 90% reduction in plastic pollution by 2040.<sup>6</sup> If successful, millions of marine animals will stay alive, humans won't ingest harmful microplastics, and we can all enjoy the spectacular sight of a clean ocean.

My generation has grown up surrounded by the internet and social media. Unfortunately, those older than us often see our connection to technology in a negative light. However, this is the tool we need to tackle environmental issues in the future. It gives me hope that people my age are taking a leadership role in solving one of Earth's most difficult problems using our expertise with technology - something that would have been impossible 40 years ago.

#### Endnotes

<sup>1</sup>Kaplan, Sarah. "By 2050, There Will Be More Plastic than Fish in the World's Oceans, Study Says." *Washington Post*, 20 Jan. 2016,

www.washingtonpost.com/news/morning-mix/wp/2016/01/20/by-2050-there-will-be-more-plastic-than-fi sh-in-the-worlds-oceans-study-says.

<sup>2</sup>"Marine Ocean Pollution Statistics and Facts 2020–2021." Condor Ferries,

www.condorferries.co.uk/marine-ocean-pollution-statistics-facts. Accessed 11 Feb. 2022.

<sup>3</sup>Plastic Oceans International. "Plastic Pollution Facts." *Plastic Oceans International*, 21 July 2021, <u>www.plasticoceans.org/the-facts</u>.

<sup>4</sup>"Removing 30,000,000 Pounds of Trash Will Actually Have This Impact #TeamSeas." *YouTube*, uploaded by Infographics Show, 29 Oct. 2021, <u>www.youtube.com/watch?v=T48\_SrFCdaQ&t=222s</u>. <sup>5</sup>Carrington, Damian. "Microplastics Cause Damage to Human Cells, Study Shows." *The Guardian*, 8 Dec. 2021,<u>www.theguardian.com/environment/2021/dec/08/microplastics-damage-human-cells-study-plastic</u>.

<sup>6</sup>*The Ocean Cleanup*. <u>www.theoceancleanup.com</u>. Accessed 11 Feb. 2022.

#### Bibliography

Carrington, Damian. "Microplastics Cause Damage to Human Cells, Study Shows." *The Guardian*, 8 Dec. 2021,

www.theguardian.com/environment/2021/dec/08/microplastics-damage-human-cells-study-plasti <u>c</u>.

- "The Global Ghost Gear Initiative." *Ocean Conservancy*, 17 Feb. 2021, www.oceanconservancy.org/trash-free-seas/plastics-in-the-ocean/global-ghost-gear-initiative.
- "Help Us Remove 30 Million Pounds of Trash by January 1st, 2022 Join #TeamSeas." #*TeamSeas*, 29 Oct. 2021, <u>www.teamseas.org</u>.
- Kaplan, Sarah. "By 2050, There Will Be More Plastic than Fish in the World's Oceans, Study Says." *Washington Post*, 20 Jan. 2016,

www.washingtonpost.com/news/morning-mix/wp/2016/01/20/by-2050-there-will-be-more-plastic -than-fish-in-the-worlds-oceans-study-says.

"Marine Ocean Pollution Statistics and Facts 2020–2021." *Condor Ferries*, www.condorferries.co.uk/marine-ocean-pollution-statistics-facts. Accessed 11 Feb. 2022.

The Ocean Cleanup. www.theoceancleanup.com. Accessed 11 Feb. 2022.

- Plastic Oceans International. "Plastic Pollution Facts." *Plastic Oceans International*, 21 July 2021, <u>www.plasticoceans.org/the-facts</u>.
- "Removing 30,000,000 Pounds of Trash Will Actually Have This Impact #TeamSeas." *YouTube*, uploaded by Infographics Show, 29 Oct. 2021, <u>www.youtube.com/watch?v=T48\_SrFCdaQ&t=222s</u>.

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The Light Will Always Conquer the Darkness

The actor Zendaya in the TV show *Euphoria* shares her character's experience with depression and says, "Suddenly you find your whole days blending together to create one endless and suffocating loop."<sup>i</sup> BIPOC students live in an indefinite loop with no way out, no one to talk about the problem because they are surrounded by people that don't look like them and don't share their experiences. Eventually those in this cycle crash into a wall of mental health issues.

As a member of the BIPOC community, I have had to deal with these challenges on a daily basis. I continually have to try to fit into society's norms, by changing my personality and code-switching. When I am around my white friends, I do not want to say the "N" word, but when I am surrounded by my Black friends, using this word might be considered normal. Black History month feels performative because people treat me better and I know it is not always sincere. All these moments bring me stress and anxiety and have contributed to some mental breakdowns.

What brings hope is that I am beginning to see that the sharing of mental health challenges is becoming more acceptable and getting support is becoming more accessible. "Despite progress made over the years, racism continues to have an impact on the mental health of Black and African American people."<sup>ii</sup> It has not always been acceptable to talk about these mental health challenges and the silencing of these voices has created a crisis. Affinity spaces, in which people with shared identities come together, has helped me to understand I am not alone. Living in a world where people are letting me talk about my stress, depression, and anxiety is a place where I want to be.

To fully address the challenges of the mental health of the BIPOC community, we also have to move beyond conversations. We need to make mental health care accessible not just for those that can afford it but for every single person who needs it. Historically, mental health care has been limited for people from the BIPOC community. Accessibility, in general, has improved. "Community Health Centers (CHCs) target medically underserved communities and have expanded by 70% in the last decade."<sup>iii</sup> We now have to ensure that this access also applies to mental health services. To make this happen we need to invest in mental health clinics that employ doctors from the BIPOC community in the most underserved areas of our country.

The feeling of weakness due to one's mental health should not be something to be ashamed of or hidden in the shadows. A willingness to be vulnerable should be seen as power and greatness. Through my own experiences with affinity spaces and health care supports, I know that I am not alone. I do not need to hide in the shadows. I hold on to the inspiring words of the author <u>Idowu Koyenikan</u> when said, "Light will always conquer the darkness."<sup>V</sup>

#### End Notes

<sup>i</sup>Zendaya. (n.d.). The other thing about depression is it kind of collapses time. Suddenly, you find your whole days blending together to create one endless and suffocating loop. So you find yourself trying to remember the things that made you happy. But slowly, your brain begins to erase every memory that ever brought you joy. And eventually, all you can think about is how life has always been this way. And will only continue to be this way. Retrieved from MagicalQuote website: https://www.magicalquote.com/seriesquotes/the-other-thing-about depression-is-it-kind-of-collapses-time/

<sup>ii</sup> Mental Health America. (2020). Black and African American communities and mental health. Retrieved from Mental Health America website: https://www.mhanational.org/issues/black-and african-american-communities-and-mental-health

<sup>iii</sup> Home Page | Department of Mental Health. (2019). Retrieved December 12, 2019, from Vermont.gov website: https://mentalhealth.vermont.gov/

<sup>iv</sup> Idowu Koyenikan. (2016). *Wealth for all : living a life of success at the edge of your ability.* Fuquay-Varina, Nc: Grandeur Touch, Llc.

#### References

Home Page | Department of Mental Health. (2019). Retrieved December 12, 2019, from

Vermont.gov website: https://mentalhealth.vermont.gov/

Idowu Koyenikan. (2016). Wealth for all : living a life of success at the edge of your ability.

Fuquay-Varina, Nc: Grandeur Touch, Llc.

Mental Health America. (2020). Black and African American communities and mental

health. Retrieved from Mental Health America website:

https://www.mhanational.org/issues/black-and-african-american-communities

and-mental-health

Zendaya. (n.d.). The other thing about depression is it kind of collapses time. Suddenly, you

find your whole days blending together to create one endless and suffocating loop. So you find yourself trying to remember the things that made you happy. But slowly, your brain begins to erase every memory that ever brought you joy. And eventually, all you can think

about is how life has always been this way. And will only continue to be this way.

#### Retrieved from MagicalQuote

website:https://www.magicalquote.com/seriesquotes/the-other-thing-about depression-is-it-kind-of-collapses-time/

# **Throwing Away Human Lives**

### "There is food for everyone on this planet, but not everyone eats."(1)

Food waste is a rapidly growing issue all over the world; not only is it an economic problem, but an ethical and environmental concern as well. Furthermore, the dearth of information and lack of media coverage inhibit our ability to find reliable solutions. It is upsetting to see such high amounts of food waste while all around us, people are struggling with food insecurity. Even so, there can be hope found in dedicated organizations devoted to improving this dilemma with innovative solutions. One such association is Apeel Sciences, a company which is helping to reduce food waste by extending the shelf life of perishable foods. With help from Apeel, we may be able to decrease food waste by staggering amounts.

In 2020, while roughly 1.3 billion tons of food was wasted worldwide, thirty percent of the global population "lacked year-round access to adequate food." (2)(3) Moreover, the waste of one-third of all food has a large economic impact. Annually, roughly 940 billion dollars are spent globally, and 218 billion dollars in the United States alone, where 40 percent of food is wasted. (4)(5) Additionally, food waste inadvertently contributes to 8 percent of greenhouse gas emissions due to the resources used in the growth, transportation, and processing of food that will ultimately not be eaten. (6) Living in a rural area like Vermont, it is easy to feel untouched by problems that affect other regions. However, food waste impacts all of our lives, and in Vermont, one in nine people face hunger. (7) If we don't act now, this problem will only continue to worsen.

Although it may be easy to fixate on the negative aspects of this issue, it is important to remember that there are promising solutions. Apeel Sciences has been working since 2012 to create a more sustainable food system. By coating fruits and vegetables in their edible plant-based formula, the rate of water loss and oxidation is slowed, keeping moisture in and blocking air out, causing produce to last two to three times longer. (8) This technology decreases waste at every stage in the food production process, from agricultural growth to grocery stores to the homes of consumers. With a presence in eight countries, they have been able to prevent the waste of 42 million pieces of fruit since 2019, and this number is rising expeditiously. (9)

With Apeel growing rapidly, recently gaining 250 million dollars in funding, and many other organizations working tirelessly to reduce food waste, there are exciting prospects on the horizon. Still, it is important for all of us to do what we can to increase our sustainability. By only buying what we need, composting, and utilizing leftovers, we can each do our part. Ignorance will lead us nowhere, and it is past time to act. We can make this world a more sustainable place if we take action now.

493 words

Endnotes:

- 1. Food and Freedom: How the Slow Food Movement Is Changing the World Through Gastronomy, Carlo Petrini
- 2. <u>https://www.nbs.net/articles/innovative-solutions-to-food-waste</u>
- 3. <u>https://www.who.int/news/item/12-07-2021-un-report-pandemic-year-marked-by-spike-in-world-hunger</u>
- 4. <u>https://www.nbs.net/articles/innovative-solutions-to-food-waste</u>
- 5. <u>https://foodprint.org/issues/the-problem-of-food-waste/#easy-footnote-bottom-1-1309</u>
- 6. <u>https://www.worldwildlife.org/stories/fight-climate-change-by-preventing-food-waste</u>
- 7. https://www.feedingamerica.org/hunger-in-america/vermont
- 8. <u>https://assets.website-files.com/5f31bfa796b7553c22964294/5f8df266e8ebd14eee9ad0</u> <u>9e\_Apeel%20LCA%20-%20October%2019%202020.pdf</u>
- 9. <u>https://techcrunch.com/2021/08/18/apeel-bites-into-another-250m-funding-round-at-a-2b</u> -valuation-to-accelerate-fresh-food-supply-chains/

Bibliography:

- Carlo Petrini, Food and Freedom: How the Slow Food Movement Is Changing the World Through Gastronomy, published 2013
- Heesung Kim. "Innovative Solutions to Food Waste." *Network for Business Sustainability,* 14 May 2021 <u>https://www.nbs.net/articles/innovative-solutions-to-food-waste</u> Accessed 8 Feb. 2022
- "UN Report: Pandemic year marked by spike in world hunger." *World Health Organization,* 12 July 2021

https://www.who.int/news/item/12-07-2021-un-report-pandemic-year-marked-by-spike-in-wo rld-hunger Accessed 8 Feb. 2022

- "The Problem of Food Waste" *FoodPrint*, 11 June 2021 <u>https://foodprint.org/issues/the-problem-of-food-waste/#easy-footnote-bottom-1-1309</u> Accessed 8 Feb. 2022
- "Fight climate change by preventing food waste." *World Wildlife Fund,* <u>https://www.worldwildlife.org/stories/fight-climate-change-by-preventing-food-waste</u> Accessed 8 Feb. 2022
- "Hunger in Vermont." *Feeding America*,

https://www.feedingamerica.org/hunger-in-america/vermont Accessed 9 Feb. 2022

Jessica Vieira, and Shannon Thoits. "Life Cycle Assessment of Apeel Produce." *Apeel,* July 2020

https://assets.website-files.com/5f31bfa796b7553c22964294/5f8df266e8ebd14eee9ad09e Apeel%20LCA%20-%20October%2019%202020.pdf Accessed 9 Feb. 2022

Christine Hall. "Apeel bites into another \$250M funding round, at a \$2B valuation, to accelerate fresh food supply." *TechCrunch*, 18 Aug. 2021 https://techcrunch.com/2021/08/18/apeel-bites-into-another-250m-funding-round-at-a-2b-va

luation-to-accelerate-fresh-food-supply-chains/ Accessed 9 Feb, 2022

Lila Armour-Jones, 1st Place, Region 4, Putney Central School

The Innovative Solutions Against a Heating World and Ocean

30 years ago, the Great Barrier Reef teemed with dozens of sea creatures.<sup>1</sup> The sounds of fish swimming in and out of coral and plants snapping with the water currents echoed through the water, leaving listeners astounded by the reverberating symphony spreading through the reef. Today, the Great Barrier Reef is fighting for survival due to coral bleaching that is caused by the warming ocean. With every passing heatwave, the coral becomes less and less healthy, driving away sea life one by one.<sup>2</sup> As creatures migrate outwards, looking for a healthier reef, the white, color drained coral is left all on its own, with no sea creatures living in it, and the reef has become silent.<sup>3</sup>

When I was younger, I aspired to become a marine biologist and dive into the ocean day after day. By the time I was nine I was convinced that this was my calling in life. But, although I have discovered other career paths that appeal more to me now, I have become increasingly aware of what is happening to the planet due to climate change. Learning about the ways that bleached reefs are being revived provides great hope for me.

British and Australian scientists have worked together to experiment with installing waterproof speakers in dying or dead coral reefs. These speakers play the sounds of healthy reefs, which are much louder than you may think. These sounds help to attract many young fish, and in the trials conducted, the reefs where healthy sounds were played attracted 50% more fish than the reefs where no noises were played.<sup>4</sup>

Yet another solution for reviving dying coral reefs involves 3D printing. Hong Kong is host to many coral reefs. Because of pollution and rock mining on the seafloor, these reefs started dying. ArchiREEF, a company started at a Hong Kong college, used the 3D printing technology at the school to create a terracotta tile to put among the dead coral. The tile mimics the shape of brain coral. On the terracotta, baby coral is non-toxically glued to help create future reef life, and ensure Hong Kong's reefs don't disappear altogether.<sup>5</sup>

Both of these solutions hold promising results. As the years pass, we are losing time to repair our damaged planet. These creative and inventive solutions give me hope because knowing that efforts are being made to right our wrongs is comforting. So often we only see chaos and destruction around us, so knowing that someone, somewhere, is trying to fix what we have allowed climate change to destroy gives me hope. Even though I am a landlocked Vermonter who doesn't have the ability to easily see coral reefs, they still hold a special place in my heart from when I was younger. If we all follow the creative and persistent mindset of these scientists and inventors, we can create more innovative solutions to problems we run into whilst battling our ever-changing and evolving climate.

#### Endnotes

1. Knowlton, Nancy. "The Great Barrier Reef – Going, Going, Gone???" *The Great Barrier Reef – Going, Going, Gone???*, 10 May 2018, https://ocean.si.edu/ecosystems/coral-reefs/great-barrier-reef-going-going-gone.

2. "Why Is the Great Barrier Reef in Trouble? A Simple Guide." *BBC News*, BBC, 23 July 2021, https://www.bbc.com/news/world-australia-

57938858#:~:text=But%20scientists%20warn%20the%20Great,outlook%20to%20%22very%20po or%22.

3. "Everything You Need to Know about Coral Bleaching-and How We Can Stop It." *WWF*, World Wildlife Fund, https://www.worldwildlife.org/pages/everything-you-need-to-know-about-coral-bleaching-and-how-we-can-stop-

it#:~:text=The%20leading%20cause%20of%20coral,pollution%2C%20or%20too%20much%20su nlight.

4. "Loudspeakers Make Dead Coral Reefs Sound Healthy and Fish Swim to Them." *Newsela*, https://newsela.com/read/coral-sounds-lure-fish/id/2000003052/.

5. "How 3D Printing Could Help Save Hong Kong's Coral." *CNN*, Cable News Network, 13 Sept. 2021, https://www.cnn.com/travel/article/hong-kong-3d-printing-coral-reefs-hnk-spc-intl/index.html.

#### Bibliography

"Coral Reefs and Climate Change." *IUCN*, 2 Mar. 2021, https://www.iucn.org/resources/issues-briefs/coral-reefs-and-climate-change.

"Everything You Need to Know about Coral Bleaching-and How We Can Stop It." *WWF*, World Wildlife Fund, https://www.worldwildlife.org/pages/everything-you-need-to-know-about-coral-bleaching-and-how-we-can-stop-

it#:~:text=The%20leading%20cause%20of%20coral,pollution%2C%20or%20too%20much%20su nlight.

"How 3D Printing Could Help Save Hong Kong's Coral." *CNN*, Cable News Network, 13 Sept. 2021, https://www.cnn.com/travel/article/hong-kong-3d-printing-coral-reefs-hnk-spc-intl/index.html.

Knowlton, Nancy. "The Great Barrier Reef – Going, Going, Gone???" *The Great Barrier Reef – Going, Going, Gone???*, 10 May 2018, https://ocean.si.edu/ecosystems/coral-reefs/great-barrier-reef-going-going-gone.

"Loudspeakers Make Dead Coral Reefs Sound Healthy and Fish Swim to Them." *Newsela*, https://newsela.com/read/coral-sounds-lure-fish/id/2000003052/.

US Department of Commerce, National Oceanic and Atmospheric Administration. "How Does Climate Change Affect Coral Reefs?" *NOAA's National Ocean Service*, 3 Mar. 2015, https://oceanservice.noaa.gov/facts/coralreef-climate.html.

"Why Is the Great Barrier Reef in Trouble? A Simple Guide." *BBC News*, BBC, 23 July 2021, https://www.bbc.com/news/world-australia-57938858#:~:text=But%20scientists%20warn%20the %20Great,outlook%20to%20%22very%20po or%22.