FLIGHT

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ALBATROSS
Department of Zoology, Gargi College

CLIMATE CHANGE : WHEN NATURE IS IN AGONY

ALBATROSS, DEPARTEMNT OF ZOOLOGY
GARGI COLLEGE, UNICERSITY OF DELHI

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CLIMATE CHANGE: WHEN NATURE IS IN AGONY

"Mother Nature is in deep agony and the climate crisis can endanger the very future of this planet. "

- Former President Ram Nath Kovind

Addressing one of the most debated topics for this year's edition, we bring to you climate change and the natures deep cry for help.

This theme speaks for the Earth, as the last few decades evinced the threats by the climate change.

We believe by the time you finish browsing this edition you'll be prudent for your daily lives and routine choices, you must be more careful to protect our trees, rivers, seas and mountains as well as all other living beings

Front Cover - Varnika Vashistha
Back Cover- Drishti Singh

FROM THE PRINCIPAL'S DESK

Prof. (Dr.) Sangeeta Bhatia
Principal

Climate change is one of the most pressing issues of our time, and it is having a devastating impact on all forms of life. Rising temperatures, extreme weather events, and habitat loss are causing many species to struggle to survive, and some are even being driven to extinction. It is our responsibility to take action to mitigate the effects of climate change and protect the incredible biodiversity that makes our planet so unique. By reducing our carbon footprint, conserving natural habitats, and supporting conservation efforts, we can help ensure a brighter future for both wildlife and humans alike. I am delighted that our students selected this topic to create awareness and to contribute their thoughts to sensitize the student's community. I congratulate the editorial team for their efforts and look forward to reading the articles and other contributions from the students on this theme.

Prof. Dr. Sangeeta Bhatia
The Principal

A MESSAGE FROM THE TEACHER IN-CHARGE

We are delighted to release a fresh edition of the Zoology Departmental magazine "Flight", focusing on the current and appropriate topic "Climate Change: When Nature is in Agony". And no doubt,

"It is a collective endeavor, it's collective accountability and it may not be too late"
~Christine Lagardo

World biodiversity has declined alarmingly in the last half a century, almost a third of those known species, are in danger of disappearing due to climate change. Human and animal health is getting impacted in a variety of ways by climate change. It threatens nutritious food supply, safe drinking water, clean air and safe habitat.
Major cause of climate change and air pollution are Greenhouse gas emissions resulting from the mining and burning of fossil fuels. Many individual measures, such food or energy and transport use choices, have the power to reduce greenhouse gas emissions and produce major health co-benefits, particularly by lessening air pollution. The phasing out of polluting energy systems, for example, or the raise of public transportation and active movement, could both lower carbon emissions and cut the load of household and ambient air pollution. This edition of our departmental magazine "Flight" is an endeavor to bring together thoughts, ideas and articles that will create more awareness.

Dr. Kuntal Kalra
Teacher In-charge

I wish to congratulate the whole magazine team for readily working for this wonderful edition. I appreciate the efforts made by student editors, Ms. Mahima, Ms. Anjali Jha and Ms. Priti Jha and reviewer for coordinating, giving valuable comments and suggestions for improving the quality of the magazine. Special thanks to them. My sincere gratitude to our teacher editors, Dr. Divya Gnaneswari and Dr. Mamtesh Singh for continuously guiding students at each stage and the outcome is one attractive and knowledgeable creation which I am sure will be treasured and valued by all. Lastly, I thank all the students and teachers who have put honest efforts for the completion of this magazine.

A MESSAGE FROM THE PRESIDENT

"You don't make progress by standing on the sidelines whimpering and complaining. You make progress by implementing ideas."
– Shirley Chisholm

Ms. Aarti Venkatesan
President

This journey of leading my department has been a surreal one. With several ups and downs, one core value that this post has imbibed in me is the "Hustle", the zeal to keep moving forward and power to make change. It was quite a journey from overlooking things to rectifying even the slightest of flaws and minor nuances, pushing over moments of self-doubt and finding solace in my job, I would surely do it all over again in a heartbeat. This journey, though not an easy one, was still the most rewarding because of my wonderful student council and I owe it to them for making this experience a memorable one. I'm grateful for this enriching experience and this was one hell of a ride!

Our magazine symbolizes our students' creativity and curiosity, and is filled with a passion comparable to the immense flames of the powerful beast. This year our magazine delves into the theme of "Climate Change: When Nature is in Agony" to explore the devastating consequences of the connected crises of nature and biodiversity loss. The land is in a constant state of birth, Giving life to all who live on Earth.

Our carelessness and fears have taken a toll over the years. This year we aim to reflect on the story of our species and the shifting paradigm of tomorrow. This edition contains plenty of firsts, some boisterous and some shy. I hope the story becomes tremendous, the flow becomes a swansong, and your trip through it is captivating.

My deepest gratitude goes to Prof. Sangeeta Bhatia, our honorable principal, Dr Kuntal Kalra, our Teacher In-Charge and Dr Madhu Yashpal, our Union Advisor for their unwavering guidance and support. I sincerely thank our Magazine Committee In-charge Dr Divya Gnaneswari and Dr Mamtesh Singh along with the students, Ms. Mahima, Ms. Anjali Jha and Ms. Priti Jha for burning the midnight oil and making this magazine possible.

ALBATROSS UNION

2022-2023

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- **Dr. M. Divya Gnaneswari**
- **Dr. Mamtesh Singh**

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MESSAGE

It gives us a pleasure to be a part of FLIGHT 2023 (annual magazine of Zoology department). Being a Zoology student, we are very opportunistic that we are able to acknowledge you all about CLIMATE CHANGE: WHEN NATURE IS AGONY. This theme is all about the climate crisis which threatens species to extinction and trigger loss of fragile ecosystems. Climate change has affected wildlife and the natural environment ecosystem in multiple ways. Spreading wildlife diseases and invasion of exotic species are a few results of climate change.

This magazine helps the students to broaden their thoughts towards the different aspects related to climate change and what are effects related to it. On that very note we the editorial team of FLIGHT has decided to go ahead with this topic.

Also, with this we have curated for you five different aspects of climate change and with this we have came up with very interesting and knowledgeable content related to this topic. In adjusting all the content like article, poem or poster etc., our team member has worked hard. They all have put their effort in making this magazine .We all ensure that every student of different department will be going to enjoy this magazine.

Flight is a combination of months of hard work by the students and teachers and would also like to thank all the people who have joined us during this journey by contributing deliberately in making this magazine.

-THE EDITORIAL TEAM

MEMORY LOOP

If I was asked to describe my journey in Gargi in one word, I would say: Beautiful! Because that is what I feel when I look back to those three years of my life.

I come from Dhanbad, a small town in Jharkhand where we never knew a lot of career options. I decided to pursue Zoology because I liked the subject but had no idea what the future would look like after that. Through Gargi, I came to understand the future that awaits me. I fell in love with the subject and got so many wonderful opportunities throughout those three years. From being an integral part of the science fest, to running for the elections, to being a treasurer and organizing many intra-department activities, Gargi has played a vital role in developing my leadership skills, boosting my confidence and my sense of responsibility. This place has also motivated me to push my boundaries. I was never a sports person, but here I started taking an interest in the sports day activities as well. I participated in the march past, something that I had never done before, yet enjoyed every minute of it. The practice sessions we had with seniors and juniors of the department, the fun we had and the games we played in between those sessions, the unity we felt as we walked holding the flag and representing Albatross cannot be defined in words.

Not just the subject, I fell in love with the people around me as well. I was lucky enough to have the most supportive and fun classmates and teachers one could want. Some of the best memories of my life come from the LTs, the labs, and the arts squad. Everyday started with canteen's samose and chai and ended with belly pain due to excessive laughing. Zistatva and Reverie were more important to us than any other festival we might celebrate at home. The shopping, the planning, getting ready for the fest with all my friends, the singing, the dancing, all those memories still bring a wide smile to my face. The final year trip to Mahendrapur was the perfect way to end this beautiful journey. Two days of absolute bliss in the mountains, in the middle of all the stress of exams, projects and deadlines was amazing.

I had studied in a Co-ed school all my life, so when I told my parents that I had chosen Gargi college after the first cutoff list came out, they asked, why a girl's college? I said I don't know, what difference will it make? But it made all the difference. One doesn't realize the importance and strength of strong women friendships unless one has experienced that. In Gargi I met some of the most incredible women, had the chance to learn from them, made some friends for life and above all, became a better and stronger version of myself.

Medha, (2016-2019)
BIOCURATOR, VELSERA

Gargi College was not just a place of learning for me but also a place where built some amazing relationships. The faculty members were knowledgeable, passionate and always willing to go the extra mile to help us excel. I remember being inspired by Dr Supriya's enthusiasm for research and Dr Mamtesh and Dr Shivani's innovative approach to problem-solving. The guidance and mentorship they provided were instrumental in my academic success.

My friends at Gargi College were equally inspiring. Being part of the Zoolog department, we shared a common goal of excellence and were always eager to help each other. The bonds we formed over time remain strong, and I am grateful for the relationships I built at Gargi.

One of the best memories from my time at Gargi College was being a part of the eco club.

Working with students who shared my passion for environmental conservation was a fulfilling experience. We organised several events and activities, including awareness campaigns, to promote sustainable practices.

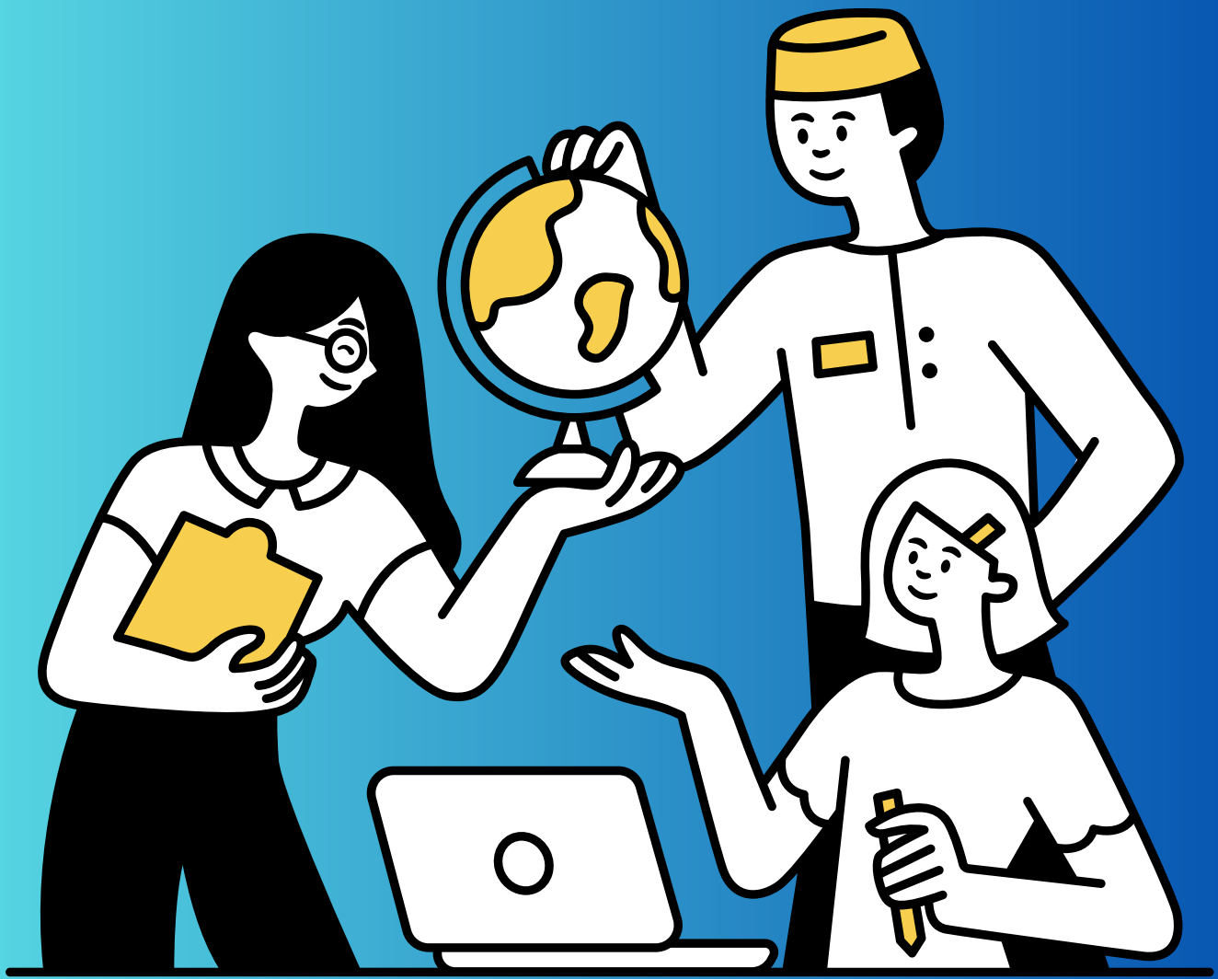
Another standout experience was being selected for the Star College Project under the guidance of Dr Supriya. My research project involved studying co-receptor switching in HIV, and the recognition it received was overwhelming. Not only did I get the opportunity to present my findings at an international conference in Australia, but I also received funding for the same.

Gargi College was not just about academics. It was a vibrant hub of various events and activities throughout the year. From the annual cultural fest to guest lectures and workshops, there was always something happening that kept us engaged and motivated. These events provided a platform to showcase our skills, network with industry professionals and gain valuable experience.

Overall, my time at Gargi College was incredibly fulfilling and memorable. It played a significant role in my academic and professional development. The experience helped me discover my passion for research, ultimately leading me to clear the National Junior Research Fellow exam in Life Sciences and pursue a PhD. I credit Gargi College for providing me with the solid foundation that helped me succeed in my academic journey. It was a place where I learned academic knowledge and life skills that have helped me in my personal and professional journey.

Dashleen Kaur
PhD Research scholar
Centre for Computational Biology, IIITD

FACULTY MEMBERS



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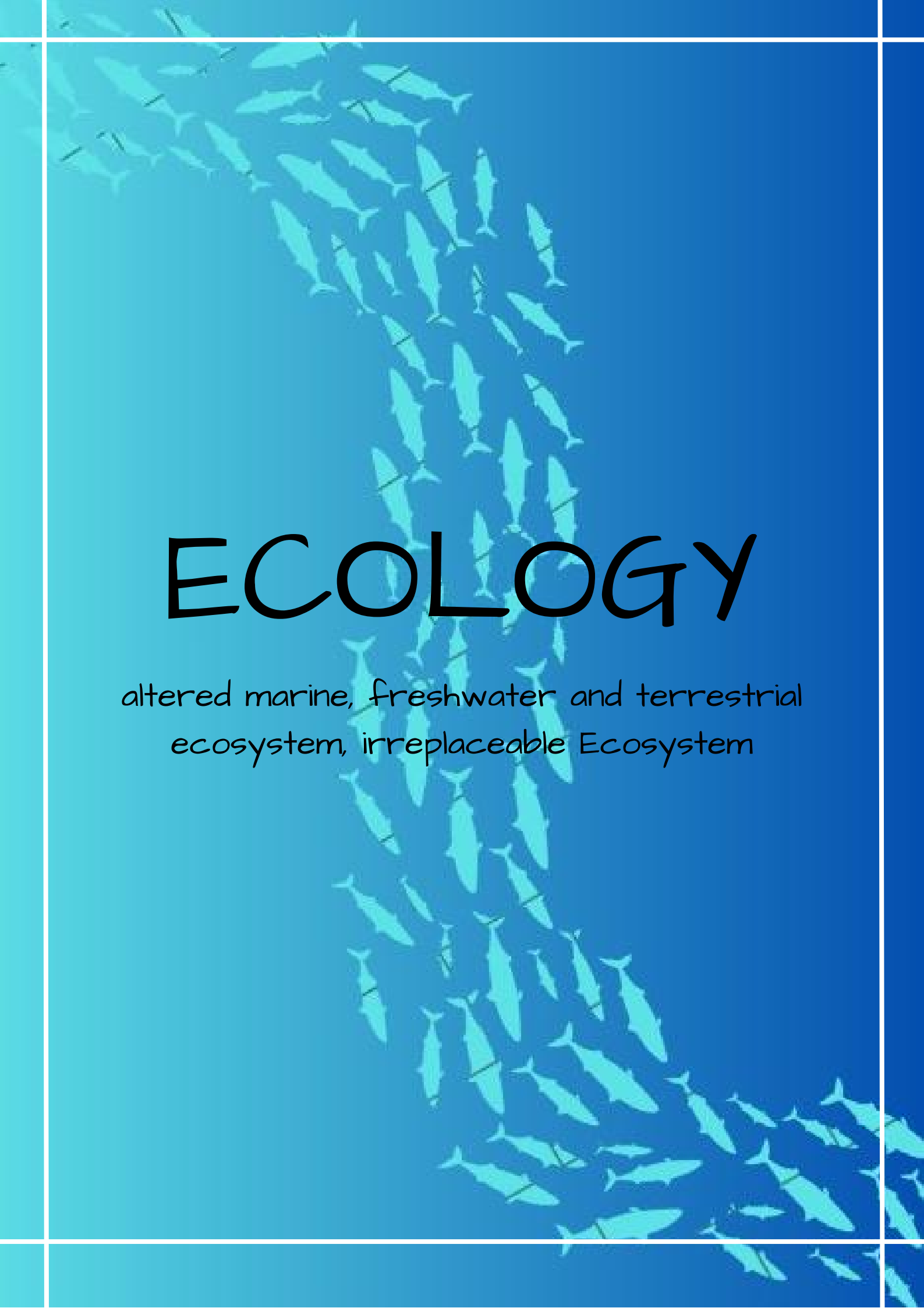


ECOLOGY

altered marine, freshwater and terrestrial ecosystem, irreplaceable Ecosystem

Howling winds, the scorching sun,
Melting feet from the sands that burn,
Charred hopes lie deep in the dirt,
Oh! How I wish for a spring in the desert.

Withering trees that once were green,
The trenches that brimmed with lives marine,
The sky that prided in all its hues,
The gardens that beamed with beads of dews.

How spirited were the tigers as they hunted their prey,
How loafing the sloths as idle they lay,
How innocent, how naive of the things that followed,
Not just our fate but theirs too we hollowed.

I wish I could go back and tell them to stop,
No rivers to foul, no trees to chop,
To learn to recycle and reuse,
Or else we'll be left with nothing to lose,
I'd go back and try planting a seed in the dirt,
Oh how I wish for a spring in the desert.

BHOOMI SINGH
B.Sc.(H) zoology
III Year

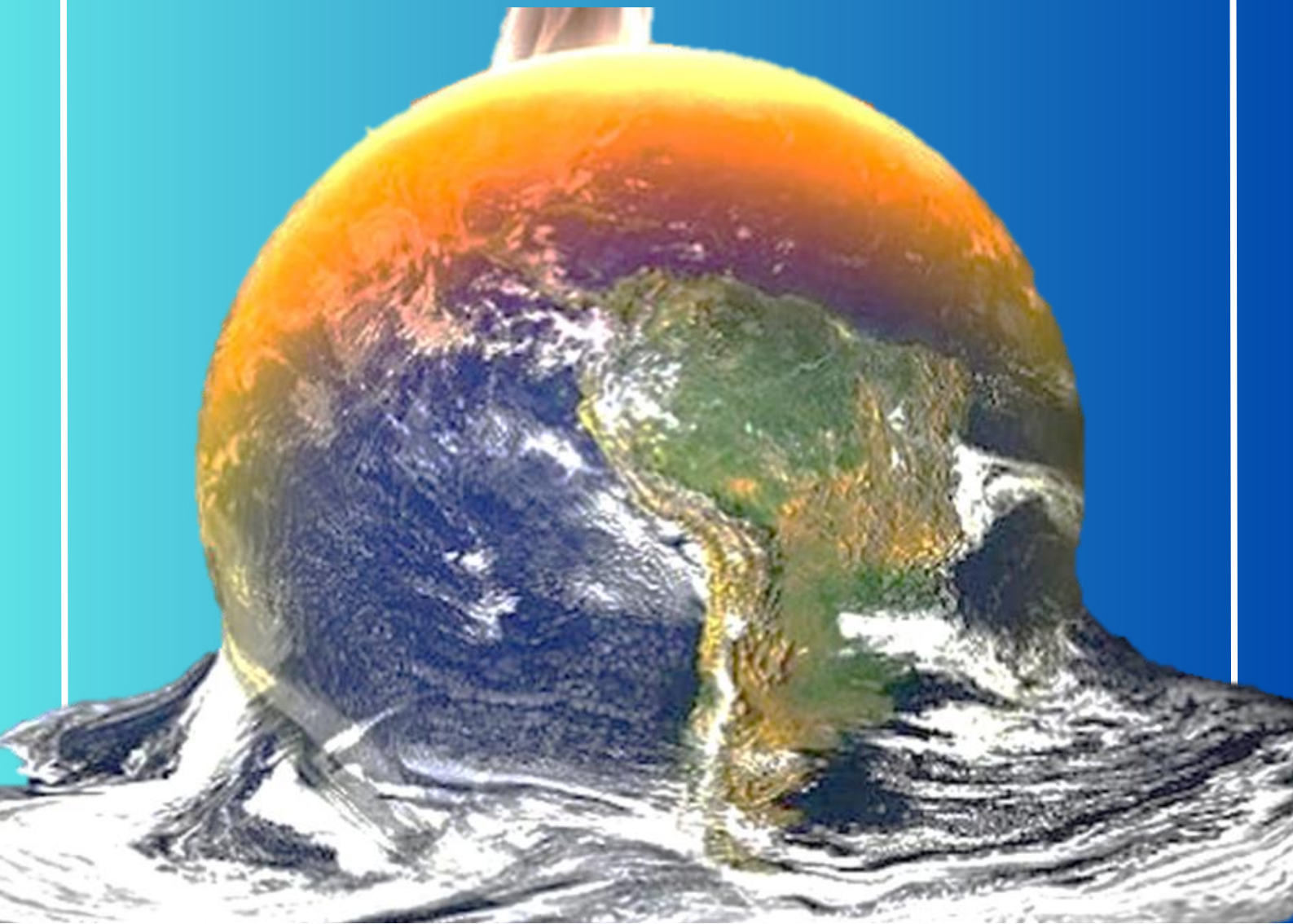
जहां पत्ते नहीं झरते
वहा वसंत नहीं आता

रेशम के पुराने घर को
तोड़कर
अंगराई लेती , तितली जैसा ही तोह है
वसंत

जहां अंडे में से
बड़े कौतुक से , बहार झांकता है जीवन
और अंगराई सी उठती है प्रकृति

साक्षी गुप्ता
प्रथम वर्ष

IMPACT OF CLIMATE CHANGE



1

One of the most important challenges of our today's life is climate change. Climate change is having an impact on every area of our life all across the planet. Climate change is having a tremendous impact on the environment and the global economy, from rising sea levels to an increase in natural disasters. Natural disasters are becoming more common as a result of climate change. Hurricanes, typhoons, and cyclones are growing more common and intense, wreaking havoc and claiming lives. Heatwaves and droughts are becoming more common as well, causing crop failures and water shortages in many parts of the world. Climate change is having an impact on the environment. Temperature rises cause species to relocate to colder places, altering ecosystems and resulting in biodiversity loss. Melting ice caps and glaciers are also harming the habitats of many creatures, including polar bears and penguins, and contributing to their extinction. The global economy is also being impacted by climate change, in addition to the environment. As a result of the rise in natural catastrophes, several regions are experiencing economic instability and billions of dollars in damage. Additionally impacting coastal areas and resulting in the destruction of infrastructure, houses, and businesses is the rise in sea levels. The effects of climate change are not only felt in the here and now; they also have long-term effects. The permafrost in the Arctic is melting as a result of the rise in global temperatures, which is harming the ecology irreparably. The problem is made worse by the greenhouse gases that are released as a result of this melting.

So, what can be done to lessen the effects of climate change? Transitioning to sustainable energy sources such as wind and solar power is one of the most effective strategies to minimize greenhouse gas emissions. Policies and restrictions can also be implemented by governments to limit emissions from transportation and industry.

Individual acts might also have an impact. Reducing energy use at home, for example, by adopting energy-efficient equipment and eating less meat, can help cut emissions. Customers can also opt to support businesses that priorities sustainability and environmentally friendly practices.

It is critical to take action to alleviate the effects of climate change by shifting to renewable energy sources and establishing emission-reduction laws and regulations. Individuals can help by reducing their energy consumption and supporting sustainable practices. Climate change is having a tremendous impact, but it is not too late to make a difference.

Start with these actions!

Climate change can be slowed down by everyone. We can change things by how we travel, how much electricity we use, what we eat, and what we buy. The amount of greenhouse gases emitted per person varies substantially between nations. Emissions in the United States were 14.6 ton of CO2 equivalent per person in 2020 (the most recent statistics available), more than double the global average of 6.3 tones and more than six times the emissions per person in India, which were 2.4 ton. By 2030, the average annual emissions per person must fall to 2 to 2.5 ton of CO2e in order to maintain a habitable environment.

To assist address the climate catastrophe,
Below steps can be helpful
Make your voice heard by those in power
Eat less meat and Dairy
Leave the Car at home.
Save water
Turn off some lights
Plant something
Get Creative {DIY}

Follow 3R rule i.e. REDUCE REUSE RECYCLE
Reduce your energy use and bills.
Respect and protect Green Spaces
Cut consumption and Waste
Talk about the changes you can make

ANJALI BHARGAVA
B.Sc.(H) Zoology
I Year

Introduction

Climate change is a severe global problem that has been affecting wildlife for decades. The effects of climate change are intensifying with time, and it is negatively impacting the wildlife population globally, forcing the extinction of some species of animals. Climate change is an essential problem that cannot be ignored, as it impacts the entire ecology of the Earth, including plant and animal species.

This essay aims to explore how the climate crisis is affecting wildlife, including the factors that cause climate change and the impact on different species of animals globally. The essay will also address the challenges and possible solutions to address the problem.

Factors that Contribute to the Climatic Crisis

The climate crisis is caused by human activities that contribute to global warming. These activities include the burning of fossil fuels, deforestation, and release of greenhouse gases that trap heat in the atmosphere, causing a rise in temperatures. These activities have led to an increase in the Earth's temperature by approximately 1 degree Celsius since the 19th century.

The effect of global warming has a ripple effect on the ecosystem, as it leads to climate changes such as melting of glaciers, rising sea levels, and intense natural disasters such as hurricanes, floods, and wildfires. These changes in climate can negatively impact the habitat and behavior of animal species, causing some to migrate, others to struggle to adapt, and some to become extinct.

Impact of Climate Change on Wildlife

Climate change has a direct impact on wildlife species, particularly those that live in vulnerable habitats. The rise in temperature has led to an increase in the frequency and intensity of natural disasters such as floods, droughts, and wildfires, which can be devastating to animal species. Below are some of the ways that climate change negatively affects wildlife.

1. Habitat Loss

Habitat loss occurs when animals & homes are destroyed or damaged, making it challenging for them to survive. The primary cause of habitat loss is deforestation, which is usually caused by human activities such as logging, mining, and the conversion of land for farming. The loss of habitats has serious implications for wildlife, and it can lead to severe population decline, and sometimes extinction. For example, Polar bears, which are native to the Arctic, rely on sea ice as a platform for hunting and mating. However, sea ice is melting due to climate change, making it difficult for Polar bears to find food and leading to a decline in their population.

2. Migration

Some animal species must migrate to different parts of the world to survive as their natural habitats change. Migration usually happens when animals can no longer find food or resources they need to survive. For instance, many bird species migrate to warm regions when the colder areas become too cold. However, climate change is making the warmer regions too hot for these bird species, leading to a decline in their population.

3. Disruption to Reproduction

Climate change can interfere with the breeding of some animal species by changing the timing of their breeding cycles or disrupting their patterns. This can have significant implications for their population growth, leading to a decrease in numbers.

For example, sea turtles rely on the temperature of the sand to determine the sex of the young.

However, with rising temperatures, there is a possibility that the sex ratio of sea turtles could be skewed, leading to the vital reduction of the population of some endangered species.

4. Spread of Diseases

Climate change can lead to the spread of diseases among animal species. As temperatures rise, they provide a conducive environment for the growth and spread of pests and diseases that can affect the health of animals.

For example, warmer temperatures in the Arctic have led to an increase in the number of mosquitoes, which poses a significant health risk to animals, including the Caribou, who are vulnerable to mosquito- borne diseases.

Challenges of Addressing the Climate Crisis and its Effects on Wildlife

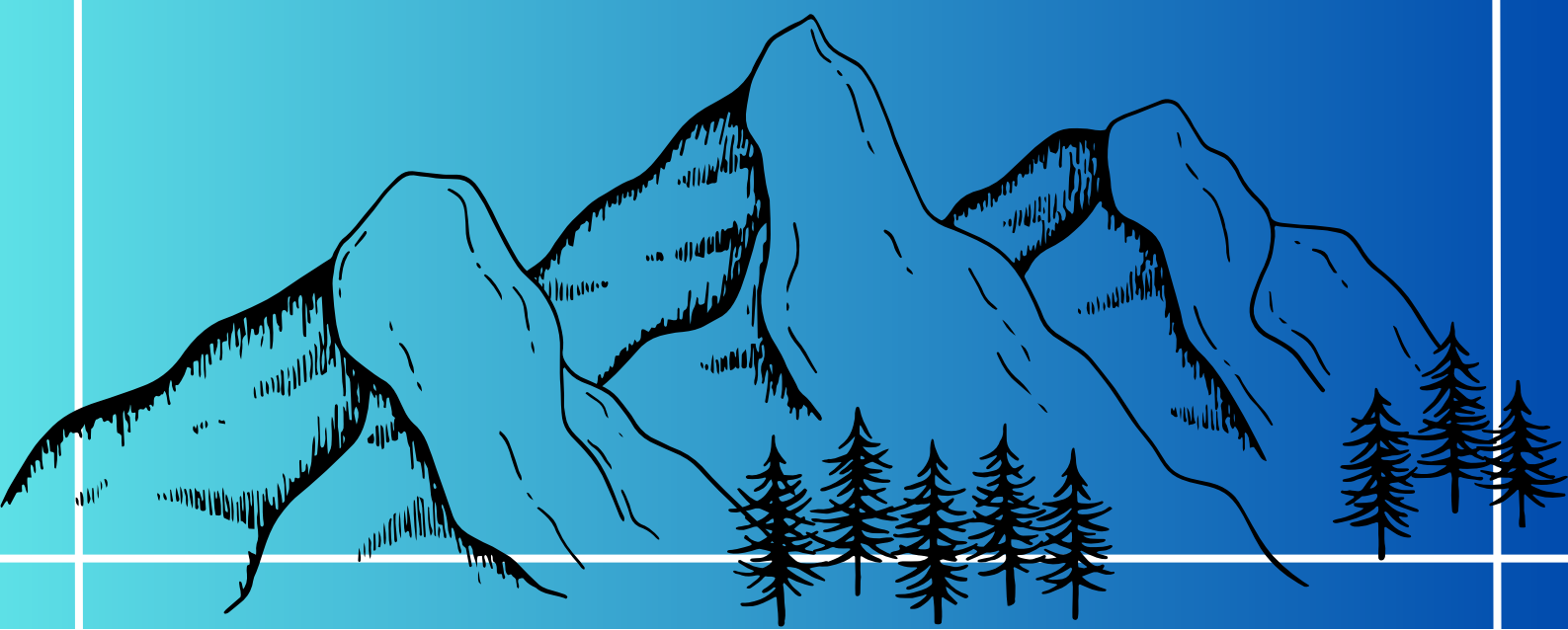
It is challenging to address the climate crisis and its effect on wildlife because it requires the cooperation of all countries globally. The reduction of greenhouse gas emissions is crucial to mitigating the impacts of climate change, but it is an uphill task.

The primary challenge to addressing the climate crisis is that developed countries such as the United States and China contribute most of the greenhouse gas emissions. However, developing countries such as Kenya and India are the worst affected by the effects of climate change, leading to a discrepancy in global mitigation efforts.

Another challenge is that the effects of climate change on wildlife are interdependent on various factors such as habitat loss, indiscriminate hunting, and poaching. Wildlife management and conservation policies can only go so far in addressing these issues if the root cause of climate change is not addressed.

DIYA SINGH
B.Sc. (H) ZOOLOGY
IInd YEAR

CLIMATE CHANGE & WILDLIFE: NORTH-EAST INDIA



“Climate change isn’t something people get to choose to believe or not; it's happening.”

- Matt Gaetz

Climate change refers to long term shifts in temperature and weather patterns, focusing particularly on increase in temperature that brings about a drastic change in the overall climatic conditions of a particular region.

These ‘shifts’ although man made nowadays, was once considered natural and has been long discussed since the 1800's. It’s horrifying that we are still suffering from it’s effects without any effective cure.

India, sadly is no alien when it comes to it’s severity and effect. Climate change in India was noticeable ever since the late 19th century with the boon of industrialization. And by 2018, it was already hit by severe heatwaves during summers.

Although it’s no surprise that the general population is suffering from the ever increasing temperatures, what we sometimes just brush off lightly is it’s effect on wildlife. Wildlife in India has been suffering through long term water scarcity, loss of habitat, depletion of food resources and forced migratory patterns pushing them to go extreme ways to just survive.

In this article, I would go on to discuss and shed light on the wildlife suffering from climate change, particularly in the northeastern region of the country.

The ‘north-east’ of India constitutes of 8 states- Arunachal Pradesh, Assam, Manipur, Mizoram, Meghalaya, Nagaland, Tripura and Sikkim. The states are known for their incredible biodiversity and wildlife sanctuaries.

While always trusted with lush green sceneries and adaptable temperatures, the region didn’t shy away from the effects of growing climate change. As an inhabitant, I can ensure that the summers were never hotter.

North east is constantly suffering from increase in yearly temperatures, abrupt monsoon rains, very heavy downpour and overall increase in natural disasters like landslides and forest fires.

These changes slowly and steadily are making their way to interfere with the wildlife and survival.

Some of the prominent wildlife suffering from climate change include:

1. The White Winged Wood Duck

Asarconis scutulata

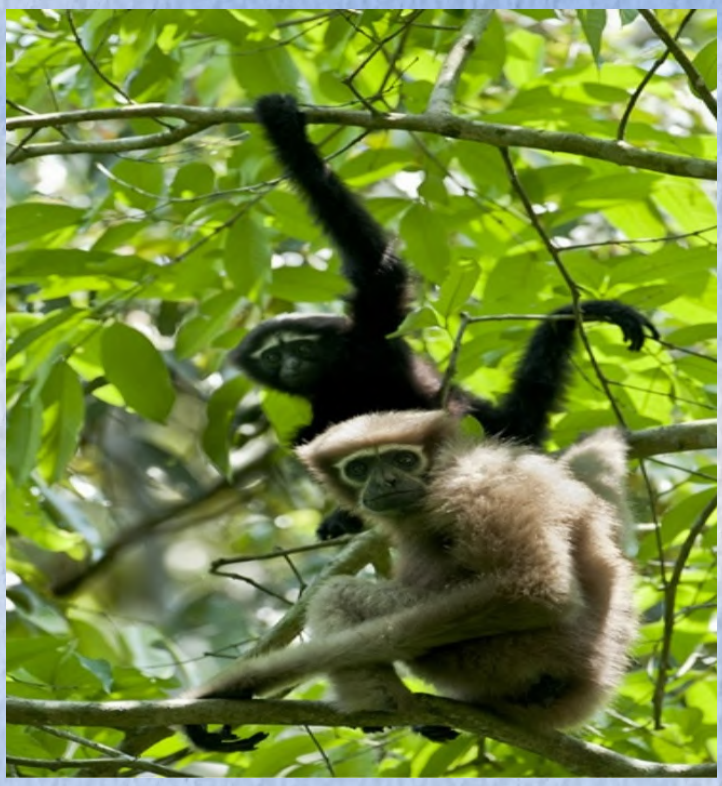
State Bird of Assam, declared endangered by IUCN in 1994, the duck is found only in the northeastern region of India and is currently in the brink of extinction due to habitat loss and lack of annual rain.

2. The Brokpa Yak

Bos grunniens

It's name derived from the Brokpa tribe of Arunachal Pradesh, these Yak are getting
increasingly difficult to herd as increase in temperature and irregular snowfal
patterns has pose several diseases on the species.

3. The Hoolock Gibbon



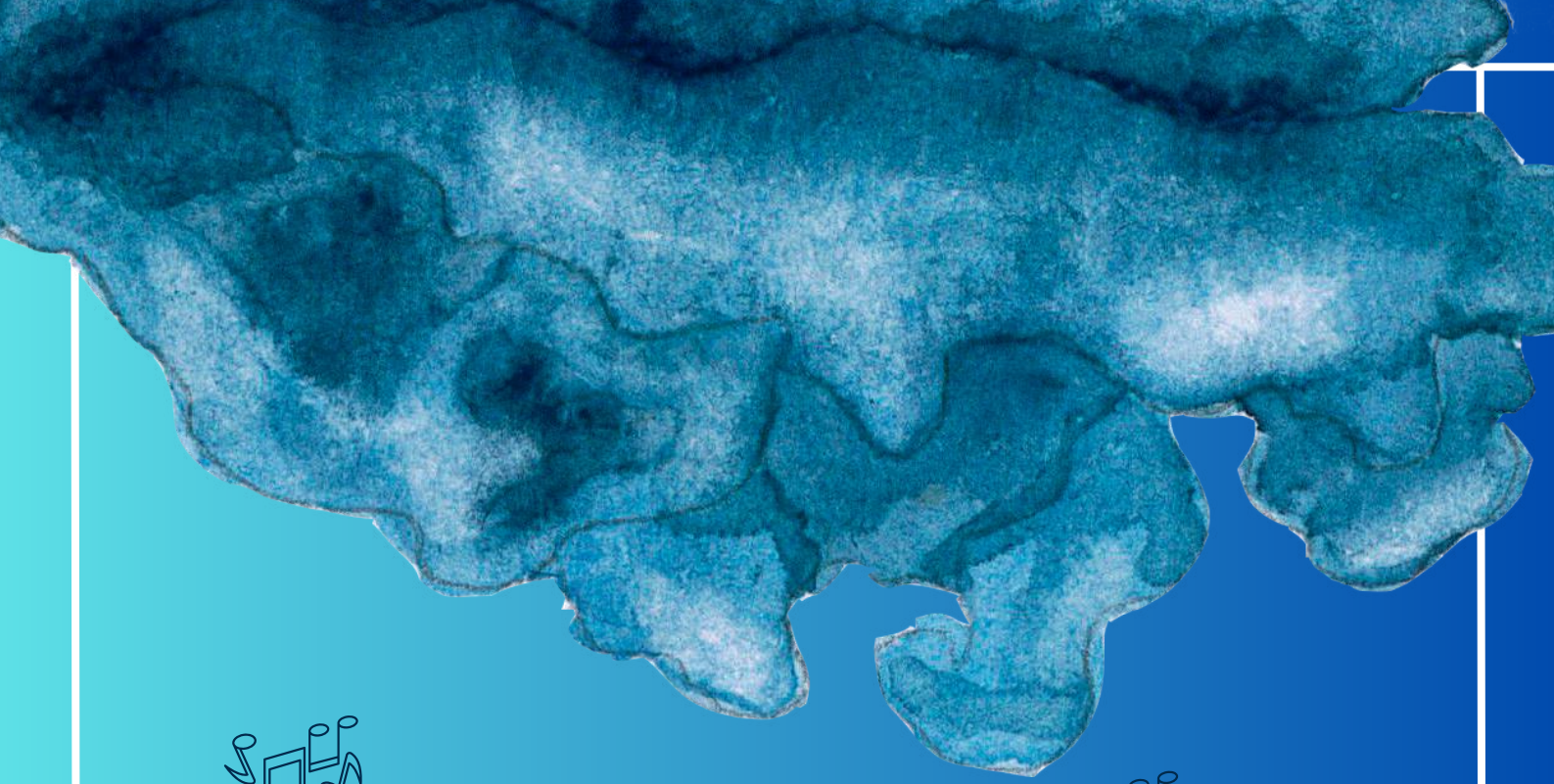
Hoolock hoolock

The only ape species found in India, this Gibbon is suffering the wrath of climate
change due to habitat fragmentation and is suspected to be extinct by 2070.

Although, these are only handful of the species suffering from climate change, there are many regional wildlife in the north east, India and the world that are facing the worst effects of climate change and are slowly admitting to extinction.

Thus, it is of utmost importance that we understand and admit that climate change is indeed 'real'. Better implementation of projects and improved agendas are ways to reduce climate crisis and save the nature from constant agony.

KAMELI JAMATIA
B.Sc.(H)Zoology
I year



RHYTHMS OF RAIN

Rain! Pouring onto us from heaven's edge
Freshens the brain and vains the pain
A necklace of pearls descending down on land
Embraces the nature with the droplets of its band
The gift of nature that beautifies the Earth
Has an everlasting and an immortal birth

The tears of God that fill the sky
Because of the condition of its children and their sigh
The priceless messenger of God, and
A connection between land and lord
The shower that falls from clouds on sand
Fulfills the thirst of everyone on land

The tears of almighty running in a race
Brings a smile on everyone's face,
Even enhances the beauty of sun
Than that of it's before the beautiful run
With sun in sky and drops in air
Forms a rainbow that too rare

A coin having a head and a tails
Even applies in nature through its mails
Rain having existence too worthy
Might become a reason for everyone's melancholy

The drops too low or too high
Can become a reason of everyone's sigh
The drops too scarce,
Can cause drought with water too sparse
The drops countless, like blood
Can result in disaster like floods

This can be result of nature's agony
When its children are being too surly

JANVI AGGARWAL
B.Sc.(H) Zoology
III Year

POSTER GALLERY

PROTECT NOT POACH!

ONLY 2 NORTHERN WHITE RHINOCEROS REMAINING IN THE WORLD.

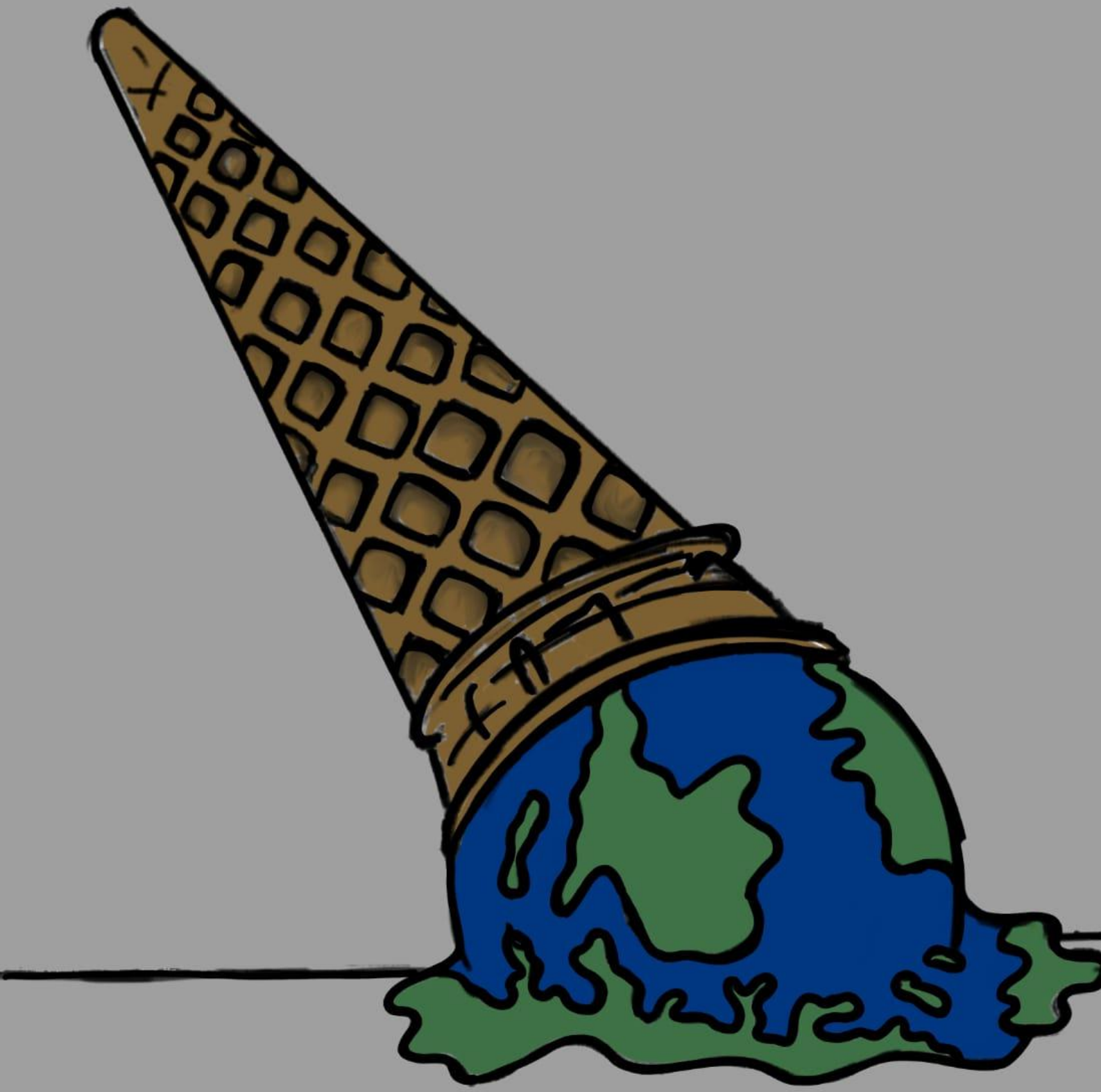
Najin and Fatu (Both female)

Both are given full 24*7 protection from poachers in Kenya's Ol Pejeta conservancy.

SUHANA NEHAL
B.Sc.(H)Zoology
III Year

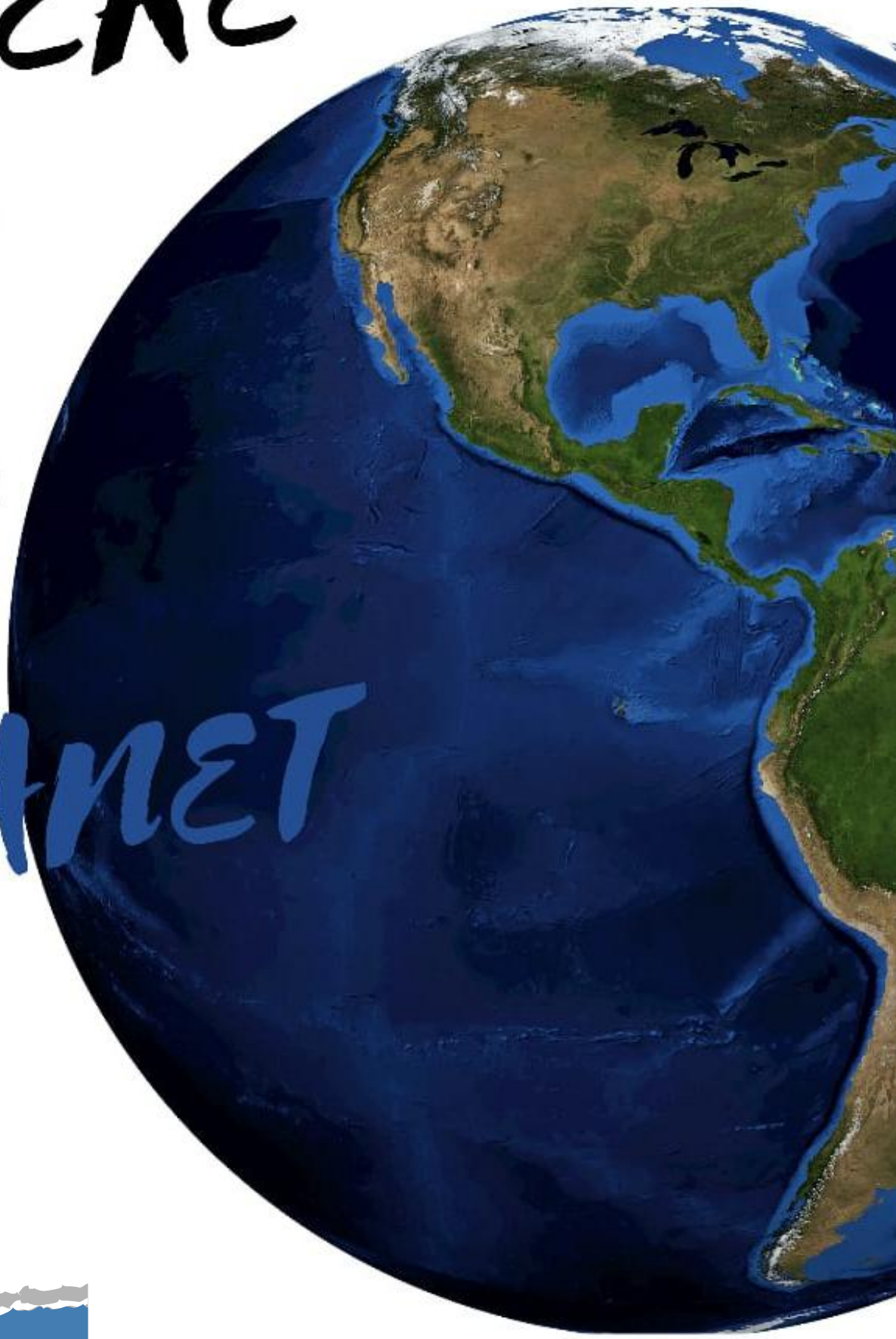
IF YOU REALLY THINK THAT THE ENVIRONMENT IS LESS IMPORTANT THAN THE ECONOMY, TRY HOLDING YOUR BREATH WHILE YOU COUNT YOUR MONEY.

-Guy McPherson



ARADHYA VERMA
B.Sc.(H)Zoology
I Year

THERE IS NO PLANET B



ARADHYA VERMA
B.Sc.(H)Zoology
I Year

ARADHYA VERMA
B.Sc.(H)Zoology
I Year

Ms. Anjali Bhargava,
BSC (H) Zoology
I year

ARADHYA VERMA
B.Sc.(H)Zoology
I Year

ARADHYA VERMA
B.Sc.(H)Zoology
I Year

QUICK FACTS

Water and climate change are inextricably linked. Climate change affects the world's water in complex ways. From unpredictable rainfall patterns to shrinking ice sheets, rising sea levels, floods and droughts – most impacts of climate change come down to water

Sea-level rise is projected to extend salinization of groundwater, decreasing freshwater availability for humans and ecosystems in coastal areas

Water quality is also affected by climate change, as higher water temperatures and more frequent floods and droughts are projected to exacerbate many forms of water pollution – from sediments to pathogens and pesticides

421 parts per million

The concentration of carbon dioxide (CO2) in our atmosphere, as of May 2022, is the highest it has been in human history.

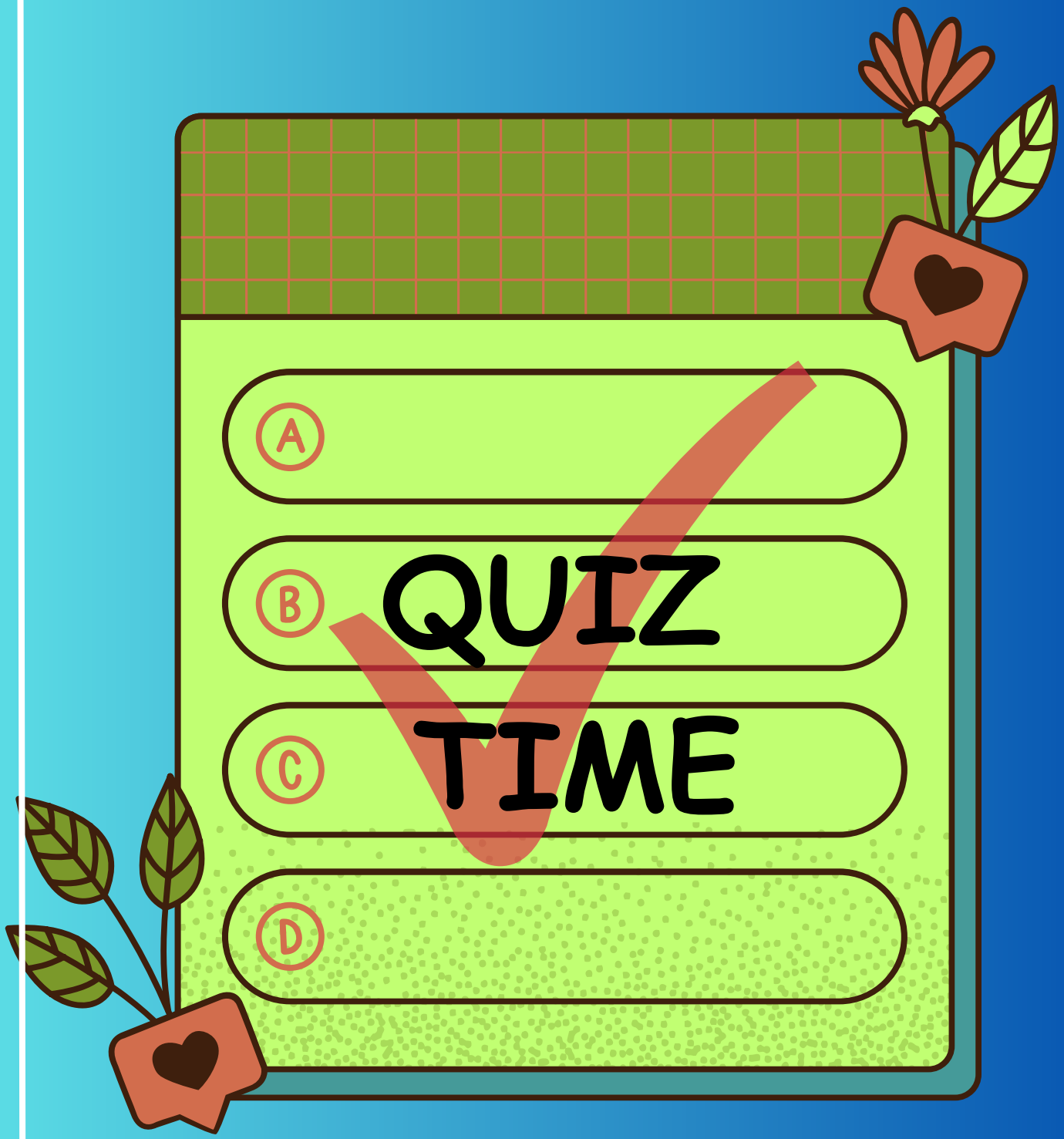
20% of emissions

As much as 20 percent of all global greenhouse gas emissions caused by humans are due to deforestation — exceeding the emissions from all of the passenger vehicles on the planet

3.6 billion people

As many as 3.6 billion people live in areas of high vulnerability to climate change impacts such as droughts, floods, heat waves, extreme weather events and sea-level rise.

Nature is an untapped solution
Tropical forests are incredibly effective at storing carbon, providing at least a third of the mitigation action needed to prevent the worst climate change scenarios. Yet nature-based solutions receive only 3 percent of all climate funding.


A
B
C
D
QUIZ
TIME

1.Which of the following is a green house gas ?

1. Carbon Dioxide
2. Methane
3. Water Vapour
4. All of the above

2. Which of the following is the biggest cause of global warming?

1. Decomposing plants
2. Burning oil, gas and coal
3. Natural variation of the planet
4. Pollution from wildfires

3. What percentage of the earth's atmosphere is comprised of carbon dioxide, the greenhouse gas?

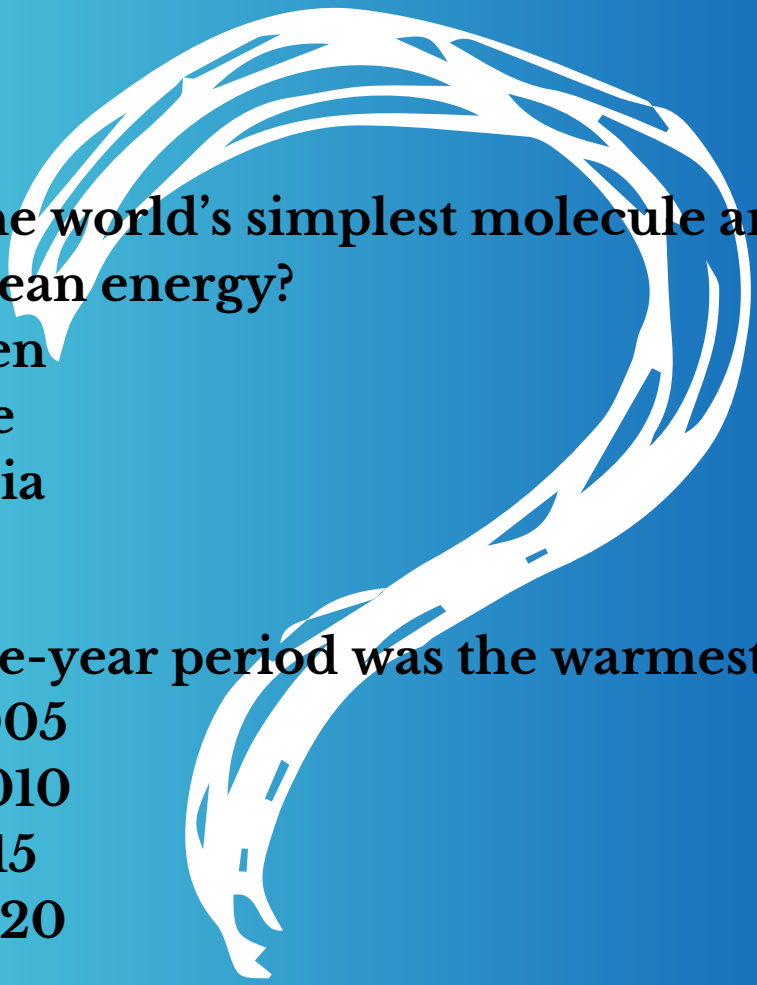
1. 0.04
2. 1.04
3. 0.14
4. 40.04

4.What is the goal of the 2015 Paris climate accord?

1. Limit global warming to well below 1C
2. Limit global warming to well below 2C
3. Limit global warming to well below 4C
4. Eradicate fossil fuels

5.Which country is the world's largest emitter of carbon dioxide?

1. US
2. China
3. India
4. Russia



6.What is the world's simplest molecule and a potential source of clean energy?

1. Hydrogen
2. Methane
3. Ammonia
4. Lithium

7.Which five-year period was the warmest on record?

1. 2001-2005
2. 2006-2010
3. 2011-2015
4. 2016-2020

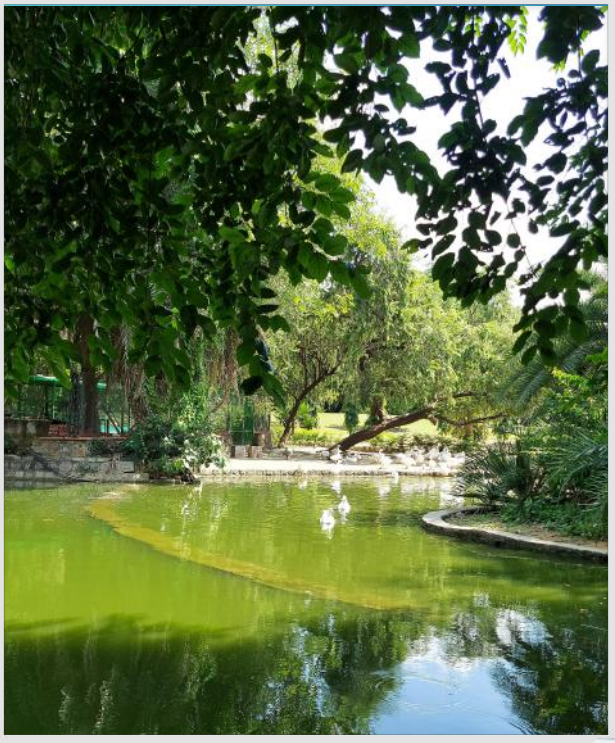
8. Which celebrity got arrested on the steps of the US Capitol building in late 2019 during a climate protest, and said they were inspired by Greta Thunberg?

1. Jane Fonda
2. Leonardo DiCaprio
3. Al Gore
4. Billie Eilish

ANSWERS:

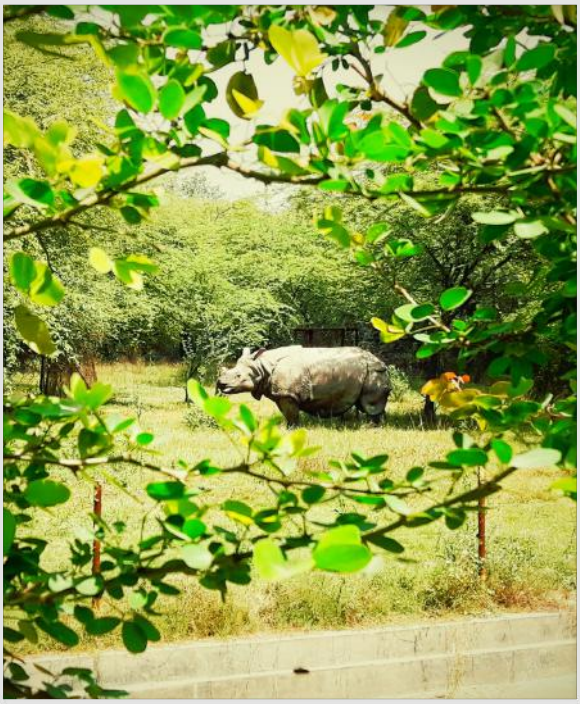
1.All of the above 2.Burning oil, gas and fuel 3.0.04 4.Limit global arming to well below 2C 5.China 6.Hydrogen 7. 2016-2020 8.Jane Fonda

ENVIRONMENTAL SNAPS



Neetu Chandrawal
B.Sc.(H) Zoology
I Year

Bhumika Chauhan
B.Sc.(H)Zoology
II Year



Ruchika Sagar
B.Sc.(H) Zoology
II Year

Suvechha Panja
B.Sc.(H)Zoology
III Year

Prakriti Panwar
B.Sc.(H)Zoology
II Year

Akriti Sharma
B.Sc.(H)Zoology
III Year

Anjali Jha
B.Sc.(H) Zoology
II Year

Anjali Bhargava
B.Sc.(H) Zoology
I Year

Anjali Bhargava
B.Sc.(H) Zoology
I Year

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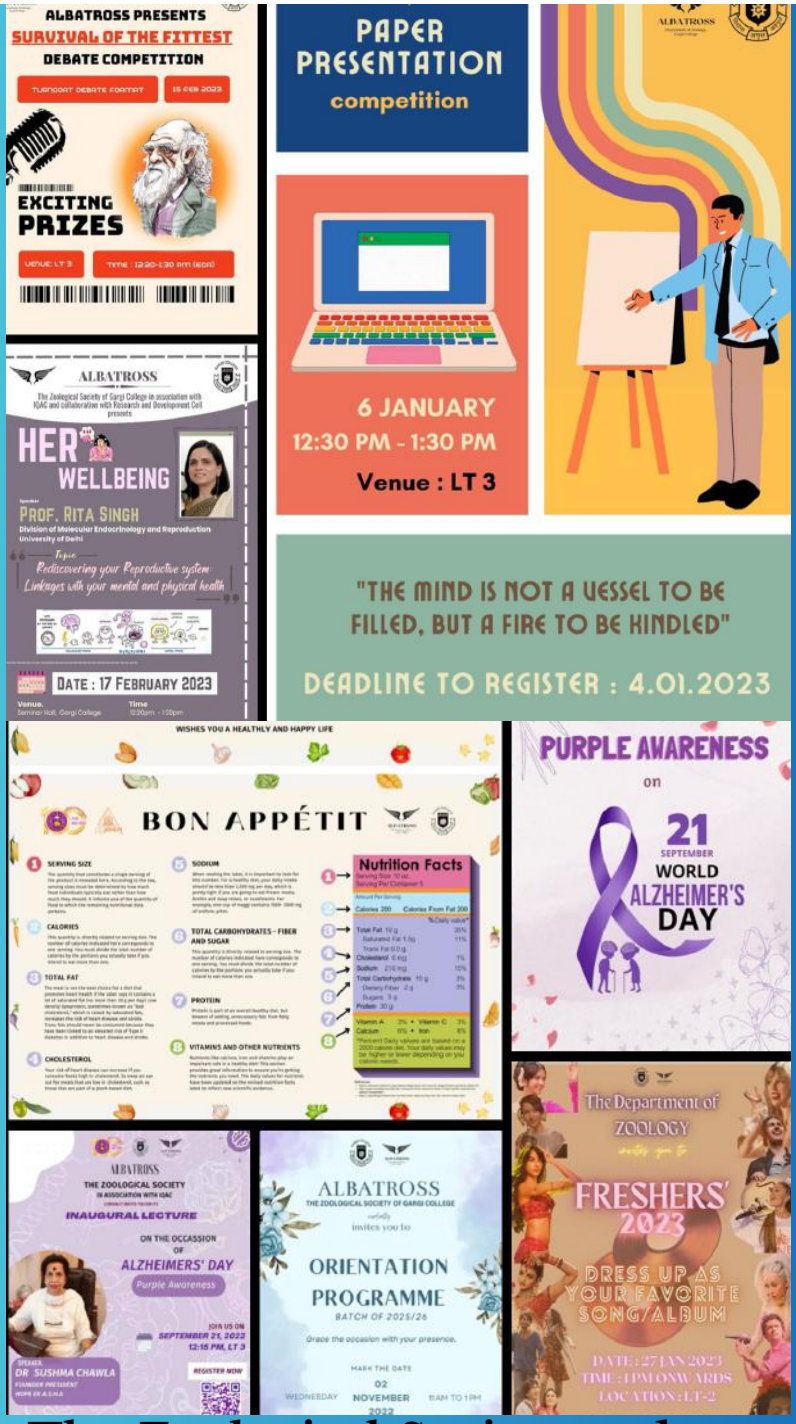
B.Sc.(H) Zoology
I Year


DEPARTMENTAL
ACTIVITES



Albatross – The Zoological Society endeavors to create an environment to instill creativity, teamwork, responsibility, and other values in the students apart from academics. Our department has organized and remained active all year round with different activities to keep up the zeal of students and to instill participation and the importance of extracurricular activities. Guest lectures, competitions and other activities have been organized to engage students beyond curricular activities to explore different areas of interest and build self-confidence and social skills.

Student Council Elections

Department of Zoology commenced its cultural calendar for the year 2022-2023 by conducting student union elections. Due to staggered semesters, elections were conducted online in three phases. The first phase of the election was held on 24th August ,2022 for the post of President, Vice President, General Secretary and Proctor 3. The second phase of the elections was conducted on 3rd September, 2022 for the posts of Cultural Secretary, Proctor 2 and Treasurer. Finally, the third phase of the polls was completed on 18th January ,2023 for the positions of Joint Secretary and Proctor 1. Elections were genuinely democratic as students contested for all the posts and were enthusiastically involved in choosing their representatives. Faculty Advisors looked after the entire process, beginning with nominations, and concluding with counting votes to declare the winners.

TEACHERS' DAY

The Department of Zoology started its event timeline by conducting teacher's day celebrations on 5th September, 2022 to express their gratitude for their teachers' immense contribution towards their development.

PURPLE AWARENESS & INVESTITURE

On 21st September, 2022, Albatross organized an interactive session, 'Purple Awareness', to mark World Alzheimer's Day. An incredibly inspiring talk about raising awareness about Alzheimer's and dementia by Dr. Sushma Chawla, Founder President of Hope Ek A.S.H.A., was well received by students.

The investiture of the new Union was also carried out on the same day.

ORIENTATION

To orient and welcome new batch students, Albatross conducted an orientation for the new members of the department on 14th February ,2023.

PAPER PRESENTATION COMPETITION

4) Department of Zoology always seeks an opportunity to provide students beyond the curricula. With this thought, an Intercollege Paper Presentation Competition was organized by Albatross on 6thJanuary , 2023, to bring students out of stage fear, improve their communication skills and develop effective presentation skills. The topics for the competition were 'Brain structures: Male brain vs Female Brain' and 'The use of electromagnetic field for navigating by sharks and sea turtles'.

DARWIN'S DAY

To commemorate Darwin's day, Albatross organized an insightful Intercollege Turncoat Format Competition on "De-Extinction Debate: Should We Restore Long Gone Species" on 15th February, 2023.

HER - WELLBEING

On 17th February, 2023, Albatross, in association with the Research and Development Cell of Gargi College, commenced a lecture series HER wellbeing, to focus on prioritizing women's overall holistic wellness, and in the first lecture of the series, Prof. Rita Singh, University of Delhi addressed essential topics relating to women's health, self-care, and self-growth in their daily lifestyle decisions.

IARI VISIT

To create awareness about millets' nutritional value and health benefits, students visited a global event on Global Millets (Shree Anna) organized by the Ministry of Agriculture & Farmer Welfare at the IARI campus, PUSA, on 18th March, 2023. Students witnessed the exhibition showcase millets and millet-based ready-to-cook and ready-to-eat products by millet-based start-ups and exporters and live cooking sessions by various international and national chefs.

SCINTILLATIONS '23

SCI STYLE

During scintillations 2023, on day 1 department organized SCI STYLE WARS-which was an accessory fashion showdown with a scientific edge to create a space for discussion and alteration of paradigm-shifting ideas making their way into and even during important cultural discourse, Prof. Pritika Bawa, National Institute of Fashion Technology, New Delhi graced the event with her presence.

साँप सीढ़ी

Apart from Sci Style Wars, Albatross has also conduced **साँप सीढ़ी** with a Twist which was a classic game of snakes and ladders but with a touch of science.

HEADS UP

Weज्ञानम् - The Research Wing of Scintillations conducted 'Heads Up', The ultimate childhood game with a science-based twist, that had participants using their intellect like never before!

RESEARCH PROJECTS

Pathfinder project 2022-2023

- **Bioactivity of plant-based nanoparticles against Diamondback moth, Plutella xylostella**

Students: Shristi Bajpai and Sabitree Patel, III LSC (P),
Mentor: Dr. Smriti Sharma and Dr. M. Divya Gnaneswari

OTHER PROJECTS

- In-silico Analysis of the drug Tecovirimat, a repurposed drug against monkeypox virus, on off-target human proteins and its impact on human health.

Student: Janvi Aggarwal, B.Sc Zoo (Hons) III Year.
Mentor: Dr. Poonam Sharma

- Enzymatic hydrolysis of biowaste and characterization for its use as PHA production media

Students: Khushboo Sharma, Prachi Sharma, B.Sc. (H) Zoology II Year; Aanandi Bandral, Aradhya Verma, Jyoti, Jyoti Kumari, Mantasa Noor, Nandani Kumari, Neetu Chandrawat, Pragya Mehta, Sakshi Gupta
Mentor: Dr. Mamtesh Singh and Dr. Shivani Tyagi

ACHIEVEMENTS OF OUR STUDENTS

Interstream Rangoli Competition (Group

- Akansha tripathi(1st year)
- Jyoti(1st year)
- Arpita Rawat(1st year)
- Mantasa noor (1st year)

1st POSITION

Winter Internship at National Museum of Natural History under MOEFCC

- Bhumika Chauhan (2nd year)

North - East Society 2022-23

- Nakshatra Wary (2nd year)- Cultural Secretary
- Nikita Biswas (2nd Year)- Science Coordinator

3 Days Workshop on Bioinformatics MIRANDA×IIT KHARAGPUR

- Nikki Yadav (2nd Year)
- Musarrat Jahan (3rd Year)
- Ruchika Sagar (2nd Year)

NeuroEunoia 2022: Brain Awareness Quiz

- Ruchika Sagar (2nd Year) - WON

Special mention in Interstream Drawing Competition by NCC Gargi

- Drishti Singh (1st year)

Inter-college Quiz Competition, Shaheed Rajguru College of Applied Sciences for Women

- Janvi Aggarwal (3rd year)- POSITION IN TOP 15

Scintillations- Mind the Acid Event

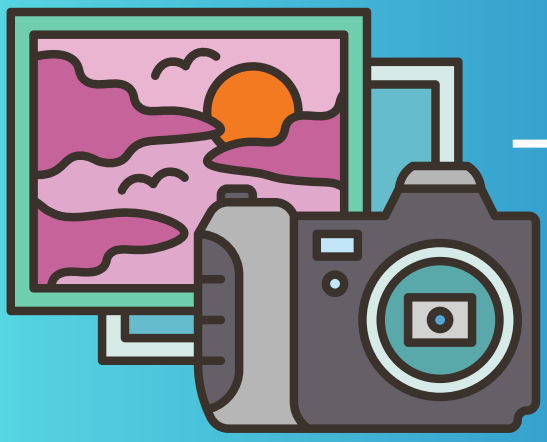
- Priyamvada Chaurasia (1st year)- 2nd POSITION

Connect-e-wittys

- Khushboo Sharma (2nd Year) - 1st POSITION
- Preeti (2nd Year)- 1st POSITION
- Priyamvada Chaurasia (1st year)- 3rd POSITION

Science Festival, Scintillations

- Janvi Aggarwal (3rd year)- 1st POSITION



Photography Inter College Competition at ARSD College

- Musarrat Jahan (3rd Year) - 1st POSITION

Best Out of Waste Competition (Intercollege) at ARSD

- Musarrat Jahan (3rd Year) - 1st POSITION

Ramp Walk -CHEMWALKERS at ARSD

- Musarrat Jahan (3rd Year) - 3rd POSITION

Sci Style-Scintillation

- Garima Singh (3rd Year)- 1st POSITION

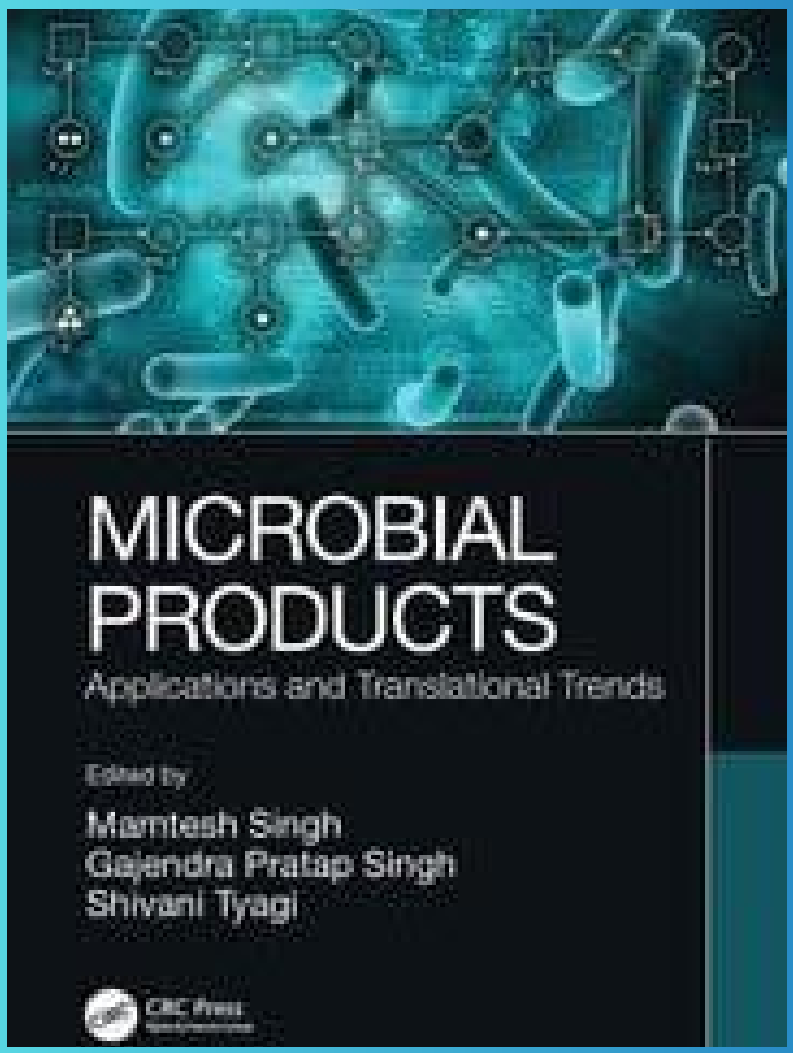
10 Days Workshop on Self Defence conducted by Delhi Police

- Khushboo Sharma (2nd Year)

Book chapter in book "Microbial Products: Applications and Translational Trends"

Probiotics for Improving COVID-19 Infection-Linked Microbiome Disparities in Gut

Authors: Shivani Tyagi, Mamtesh Singh, Divyanshi Chauhan, Aarti Venkatesan



ACADEMIC ACHIEVERS

II Year

1. NIKKI YADAV- 9.32

2. KIRTI - 9.27

3. MUSKAN GUPTA - 9.05

3. ABHIRAMI - 9.05

III Year

1.MUGHDHA SHARMA-9.14

2.SHIPRA-9.07

3.BISMA KHAN-9.04

BATCH OF '23

Ist row:(L-R) Yuvika,Ridam, Kanishka Sisodia, Kashish Nimish, Prof.Madhu Yashpal Tanya Jain, Diksha Mishra, Harish,Sonia,Akriti Sharma, Anushka Singh,Shipra

2nd row (L-R) Tanisha, Preet Parihar, Aarti Venkatesan , Bisma Khan,Karnika Prakash Aditi Kherwal, Veena, Manisha, Jyoti Singh, Sheetal,Nisha Yadav, Gunjan,Ruchi

3rd row:(L-R) Shivangi Singh, Varnika Vashishta, Sonali, Swati, Khushi Meena, Nikita Ranjan, Janvi Aggarwal, Vaishali, Seema Kanwar, Shabnam, Nikita Lamba, Himani, Upasna, Garima Singh

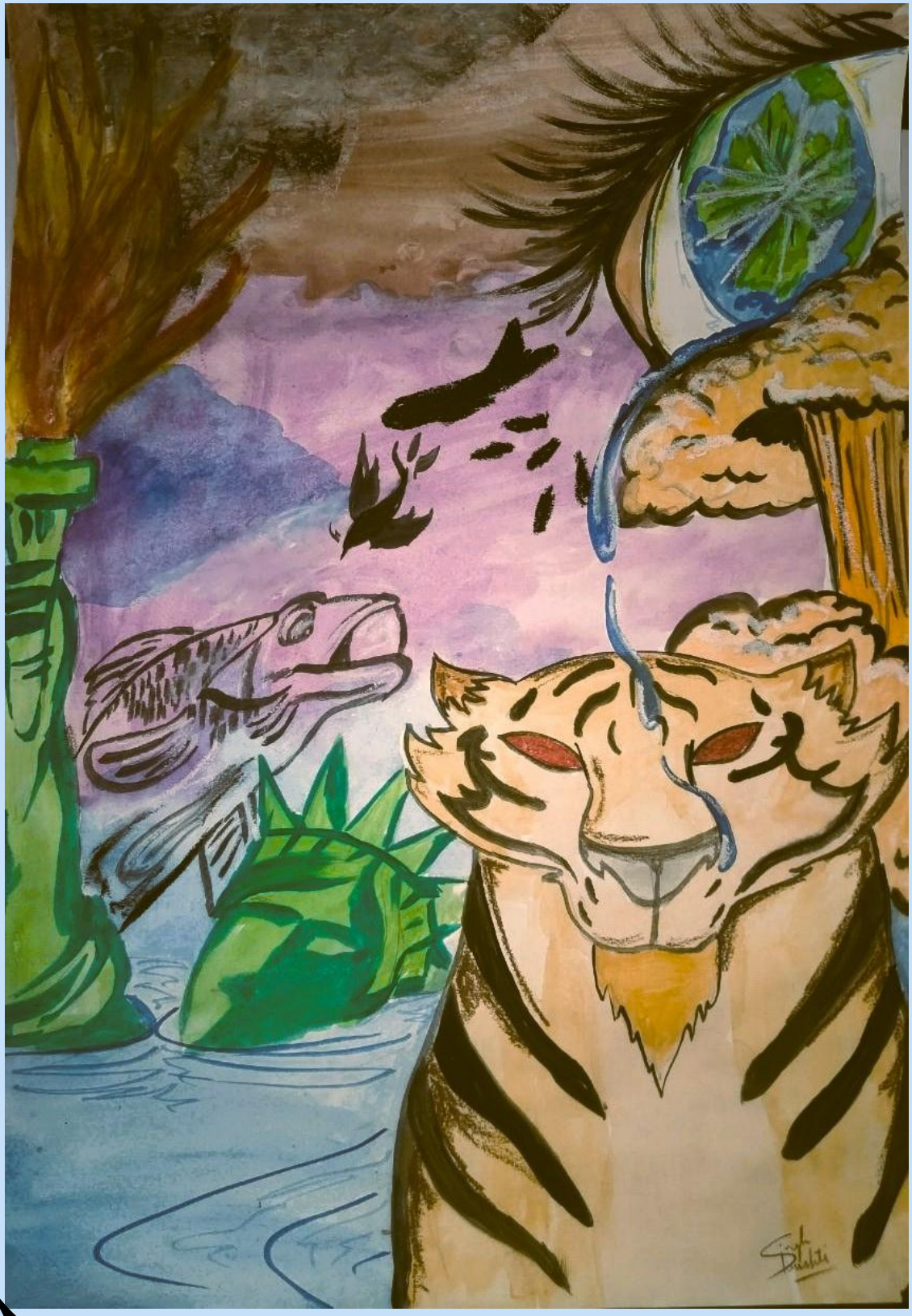
4th row(L-R): Divyanshi Chauhan, Swati Sehrawat, Suvechha Panja, Aarushie Chatterjee, Nidhi, Smriti Verma, Bhoomi Singh, Musarrat Jahan, Afreen Bano, Vaishnavi Singh, Suhana Nehal, Mugdha Sharma,Akriti Maurya

BATCH OF '24

BATCH OF '26

FLIGHT

ISSUE 16 , 2023



CLIMATE CHANGE: WHEN NATURE IS IN AGONY

ALBATROSS
DEPARTMENT OF ZOOLOGY
GARGI COLLEGE