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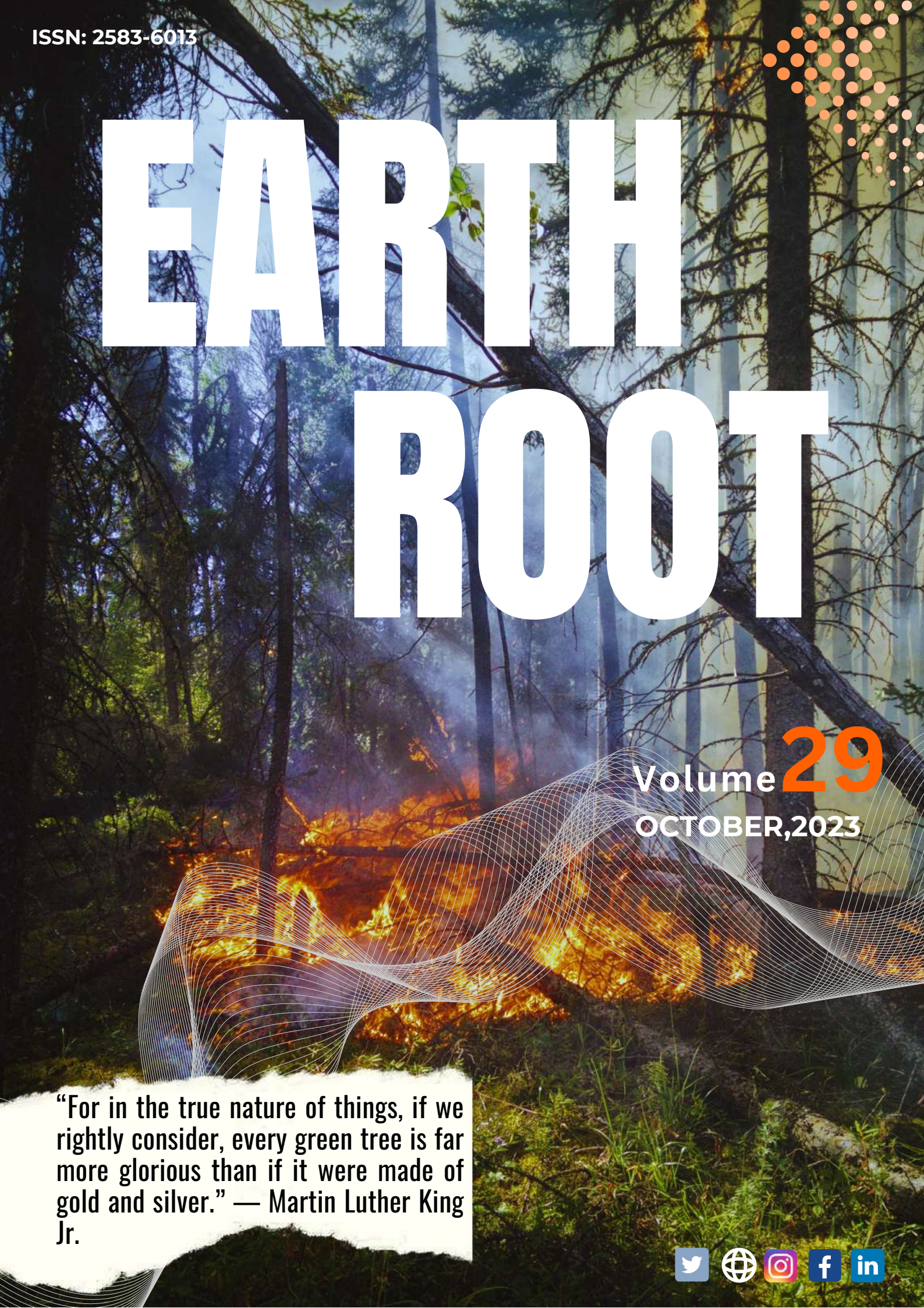

"For in the true nature of things, if we rightly consider, every green tree is far more glorious than if it were made of gold and silver." — Martin Luther King Jr.

About E-magazine

"Earth Root" is an open access e-magazine in the discipline of Environmental sciences published by Earth Root Foundation. The aim of the e-magazine is to provide information and upgradation of knowledge about environmental issues on wider scale and to share ideas and resources to the readers. Using essential knowledge people can lead a healthy life, which is more sustainable and can connect with ongoing efforts for stopping catastrophically the climate change. E-magazine caters to all related environmental aspects ranging from big issues like climate change, renewable energy and pollutants in the atmosphere to the health of human and living beings on Earth. We also take topics of water resources and efforts and measurement to provide optimum use of it; including large scale atmospheric circulation linked with oceans and ecology.

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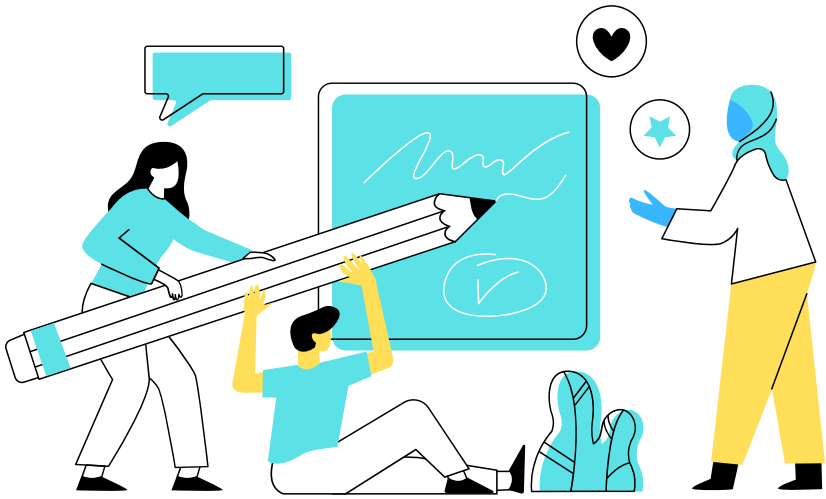

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WILDFIRES ON THE RAMPAGE: THE NEW NORMAL

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In the vast tapestry of Earth's natural cycles, wildfires have long played a role, serving as both a destructive force and a rejuvenating power, vital for ecosystems. However, recent years have borne witness to a profound transformation in these fiery phenomena, where what was once a natural rhythm has become an alarming new normal. This ominous shift raises concerns not only for the environment but also for humanity, as wildfires escalate into uncontrollable infernos threatening lives and livelihoods worldwide.

When we think of wildfires, the imagery often conjures remote forests and uninhabited wilderness. Nevertheless, an undeniable shift in the character and frequency of wildfires has taken hold in recent decades. A convergence of factors, predominantly driven by climate change and human activities, lies at the heart of this menacing evolution.

Climate Change: A Fiery Catalyst

The primary driver behind the surge in wildfire activity is undeniably climate change. Soaring global temperatures have given rise to drier conditions, prolonged droughts, and an intensified frequency of heat waves. These conditions provide the ideal stage for wildfires to ignite and spread with unprecedented rapidity.

Recent examples abound, from the harrowing 2019-2020 Australian bushfires, often referred to as "Black Summer," which left an indelible mark on the continent, scorching millions of acres, decimating ecosystems, and taking a toll on both human and animal lives, to the intense wildfires that have swept through the western United States, leaving a trail of destruction in their wake.

Human Activity: The Spark of Catastrophe

While climate change sets the stage, human activities often provide the spark. Many wildfires today are the direct result of human negligence, stemming from discarded cigarettes, unattended campfires, or downed power lines. In some cases, arson is to blame. Additionally, urban sprawl into fire-prone areas, known as the wildland-urban interface, has brought more people and property into harm's way.

As human populations continue to expand into these fire-prone regions, the demand for resources like water and power has grown, leading to increased infrastructure development and human activity in areas susceptible to wildfires. This convergence of factors has created a perilous situation where wildfires now threaten not only the natural environment but also human lives and livelihoods.

Effect on Humans: An Inevitable Consequence

Wildfires are no longer confined to the realms of forest rangers and ecologists; they now present an immediate and tangible threat to human communities. The increasing frequency and intensity of wildfires have wrought havoc on society, causing widespread devastation and loss. Perhaps the most tragic of all the consequences is the loss of human lives. As flames spread with astonishing speed, authorities often struggle to evacuate affected areas in time, leading to fatalities that might have been avoided with better preparedness and resources.

Wildfires can swiftly obliterate entire communities, reducing homes to ashes. The financial and emotional toll on those who lose their homes is immeasurable. Insurance costs rise, and the path to recovery is often long and arduous.

Beyond the visible destruction, the smoke and ash produced by wildfires pose severe health risks. Fine particulate matter and toxic gases in the air can lead to respiratory problems and exacerbate preexisting conditions. Vulnerable populations, such as the elderly and children, are particularly at risk.

The economic repercussions of wildfires are substantial. The costs of firefighting efforts, property damage, and business disruption can result in long-term economic setbacks for affected regions.

A Global Concern

The wildfire crisis is not confined to a single nation or continent; it is a global issue that demands immediate attention and concerted efforts. As wildfires continue to blaze on multiple fronts, they release massive amounts of carbon dioxide into the atmosphere, further exacerbating climate change. This vicious cycle threatens the very stability of our planet's ecosystems.

To address the wildfire crisis effectively, international cooperation is paramount. Countries must collaborate, sharing resources, expertise, and best practices for managing and combating wildfires. Cross-border teamwork can help mitigate the impact of these fires.

Climate Action: A Lifeline for the Future

Addressing the root cause of the wildfire crisis necessitates vigorous action against climate change. Reducing greenhouse gas emissions, transitioning to renewable energy sources, and implementing sustainable land management practices are essential steps in preventing the worsening of wildfire conditions.

Developing and implementing advanced early warning systems can save lives and reduce property damage. These systems should include real-time monitoring of fire conditions and swift evacuation protocols.

Communities residing in wildfire-prone areas must be educated about the risks and trained in wildfire preparedness. This includes creating defensible spaces around homes, establishing emergency plans, and fostering a culture of fire safety.

Urban planning and land use policies should account for wildfire risk. Building in fire-prone areas should be minimized, and construction materials and landscaping choices should prioritize fire resistance.

Conclusion

Addressing this crisis requires a global effort. Nations must unite to combat climate change, implement effective wildfire management strategies, and prioritize the safety and well-being of their communities. The cost of inaction is simply too high, and the time to act is now. If we fail to address the wildfire crisis, we risk irreparable damage to our planet and a future defined by the ravages of uncontrollable wildfires.

THE MIRAGE OF 'GREEN-SHEEN'

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Many of us are well aware of the the concept of mirage in optics. A mirage is a representation of something that appears to be true or real but is actually false or unreal. Green Sheen or Greenwashing is one such environmental jargon mirages.

This frequently overused marketing ploy works against genuine initiatives to develop sustainable products and methods. The UNDP Climate Dictionary defines Greenwashing as "a marketing exercise where a company makes misleading claims about their positive environmental impact or the sustainability of their products and services to persuade consumers that they are acting on climate change." Greenwashing may occasionally occur accidentally due to ignorance of environmental issues. It can also be done on purpose as a public relations and marketing strategy, capitalising on popular support for environmental regulations for financial gain. The major issue of GREEN-SHEEN is that it has the potential to reduce public support for sustainability and let harmful environmental effects persist unchecked.

Long before New York-based environmentalist Jay Westerveld first used the phrase "GREENWASHING" in the 1980s. With the launch of the Keep America Beautiful Campaign in 1953, beverage manufacturers focused on cultivating the "Green Image" of the sector through ads rather than "doing the actual job" by improving their brewery practices.

This was the very beginning of the unethical practice of "green sheening." Green sheen is ever-pervasive in almost all the sectors from fashion, food, tourism & hospitality to automobile and even political campaigns

In terms of numbers, there is evidence that greenwashing is a serious issue in India. In a poll conducted by the market research company YouGov, 69% of Indian customers stated they were concerned about greenwashing and 71% said they had heard of it. In addition, according to a research by the consulting firm Accenture, only 29% of Indian customers believe that businesses which make environmental promises are telling the truth. The other side of the picture is that 79% of the green promises made in advertising in India were false or inflated, according to a different study by the Advertising Standards Council of India (ASCI).

The Popularising culture of Green-Sheen

Green-sheening aids businesses in portraying a favourable brand image by claiming to support a deserving cause in the global era where governments and international organisations are attempting to achieve the SDGs through environmentally sensitive policies and programs.

Services that are greenwashed, not environmentally friendly, and not sustainable take use of a good cause to hide the deceit. Consumers in India are willing to buy things that are actually environmentally beneficial, according to survey by Bain & Company, at least 60% of Indian consumers are willing to pay more for sustainable products, and 52% of Indian urban consumers anticipate increasing their expenditure on environmentally friendly companies over the next three years. Additional research indicates that consumers are less likely to detect greenwashing when they perceive a company or brand to be trustworthy. Eventually, this is easily exploited by the already well established brands and businesses and further complexes the pressing problem. Greenwashing has negative effects on more than just customers. This ad gimmick undermine the reliability of the goods and services offered by businesses making the real efforts. They may be the sole cause of customers being unable to make ecologically responsible selections without worrying about being taken advantage of.

The famous Food industry greenwash:

In almost all its restaurants in Europe, McDonald's switched from a red-yellow to a green□yellow logo in 2009. Later, a spokesperson for the company said the modification was made "to clarify their responsibility for the preservation of natural resources." McDonald's was charged with greenwashing in October 2021 for promising to achieve net-zero emissions by the year 2050 Starbucks released a lid with a built-in drinking straw in 2018 in response to growing calls to prohibit plastic straws. Despite the lid's branding as compostable, it actually contained more plastic by weight than the old straw and lid combined.It is crucial to remember that compostable straws and lids must be separated from other plastics by adequate waste collection systems and then sent to suitable industrial composting facilities.

Left: mcDonalds red-yellow logo. Right: mcDonalds green-yellow logo. Source: myshadeofgreen.com

Left: Starbucks old plastic cup with plastic lid and straw. Right: Starbucks new plastic Sippy cup with plastic lid. Source: Dailymail.co.uk

How to spot the gimmick?

Although as more and more individuals become interested in adopting greener lifestyles, sustainable and environment-friendly products, they aren't routinely reviewing the bogus claims on products they might be utilizing on a daily basis. When it comes to greenwashing, unfortunately it can be pretty difficult to spot (and avoid) since sustainability is quite a complex topic. However there are few simple ways to ensure that you avoid getting trapped by exaggerating false claims.

False Labels

It is relatively simple to utilise a fake green label and decorate things with a logo or image to give them a sustainable appearance.

Many businesses might use unjustified labels like "green," "natural," and "eco-friendly" Since mindful customers are more inclined to choose services with such labels, these labels are extremely beneficial to these businesses. Simply put, stay away from services with such ambiguous descriptions and scant supporting evidence. One of the most popular types of greenwashing is this because consumers readily believe such claims. So search for strong evidence and reliable certifications to support these claims.

Buzzwords Over-usage

Green is the new black. Green buzzwords like "eco-friendly," "natural," "sustainable," "green," "local resources," and "recyclable" are used to imply that a company cares about the environment. But there is no need for support because these words are simple to utilise. For example, it's not necessary to interpret a plant or green colours in commercials. Occasionally, businesses will utilise images of individuals planting trees or the recycling logo but these actions never truly take place. The majority of people are susceptible to these kinds of visuals and will use the services in accordance with untrue assumptions. Make an effort on your end to check the company's website in order to find more support behind their claims.

No Proof. Only Claims

Can the claims be proven through actual numbers, figures and data? Evidence of green practices and sustainability claims must be made available to customers via the company's website on a regular basis. With appropriate data, a legitimate firm will have no issue showing its authenticity. To distinguish between greenwashing and sustainability, we as consumers must carefully scrutinise marketing statements to see if there is enough data to back these claims. Transparency is essential for consumers to understand whether all products are environmentally ethical.

Data provides tangible evidence of progress toward sustainability claims. It will also give traceability and demonstrate genuine efforts undertaken to reduce environmental impacts.

Conclusion

According to a study conducted by the international marketing firm TerraChoice, the market for environmentally friendly goods has grown by 73 percent over the past five to seven years. This opens the door for ESG governance, which can help the company to adhere to and have proof of reliable procedures so they can make correct public statements and claims about being "green" or "sustainable" in terms of their products and services. ESG credentials are scrutinised by authorities, investors, clients, and other stakeholders. In order to minimise complaints and enforcement action, notably regulatory investigation, lawsuits, and the negative publicity that follows it. Firms can take proactive measures to reduce the likelihood of accusations of greenwashing. India currently lacks specific laws that prohibit greenwashing. The Consumer Protection Act 2019 is the main piece of legislation that regulates false advertising. It defends customers against deceptive advertising and other unfair business practices. Additionally, the Advertising Standards Council of India, a self-regulatory organisation that serves as the de facto authority on advertising in India, has released a voluntary code that establishes standards for advertising in a variety of industries. Despite this, regulations specific to green-sheening are necessary to bring about significant changes when it comes to implementing sustainability in its actual sense.

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ALARMING DECLINE IN THE POPULATION OF AERIAL INSECTIVORES

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There are almost 10,700 species of birds that are found all over the world in all major terrestrial biomes. Thus, they express a large variety of lifestyles and foraging behaviors. Some birds primarily eat plant products like seeds, fruits, and nectar, while others consume animals or a mix of plants and animals. Many bird species primarily eat insects and rely on various parts of insects as their prey. Bird species that forage for insects while flying are known as aerial insectivores which include 4 families swallows (Hirundinidae), swifts (Apodidae), flycatchers (Tyrannidae), and nightjars (Caprimulgidae). An aerial insectivore is a predator that is highly mobile and feeds on a variety of prey that have a wide range of distribution.

While the majority of the declines started in the 1980s, the guild continues to struggle with multiple environmental pressures, such as climate change, homogenization of landscapes, urbanization, intensive agrochemical use, insect decline, and their cumulative and interacting impacts. This decline is so alarming that nine of the 31 species of aerial insectivores are now listed under the federal “Species at Risk Act” of Canada and researchers have developed a roadmap to the recovery of this group of birds.

However, information on the status of these birds from developing nations, such as India is lacking due to the lack of historical data on potential causal factors, such as changes in insect populations and nonbreeding ground conditions.

REVIEW OF POTENTIAL CAUSES OF DECLINES

Declines in Aerial Insects

The population decline of aerial insectivores is due to a decrease in their prey base of flying insects. The issue of pollinator decline has become a concern that demands immediate attention. Causes of declining insect populations include intensified agriculture, habitat loss, pesticides, reduced resource diversity, extreme weather, and climate change. Changes in agriculture, such as increased use of pesticides and agricultural intensification, may be contributing to declines in insect populations, including aerial insectivores. Over the past few decades, the push for greater agricultural output has led to changes in crop production methods, such as the use of more agrochemicals, improved drainage, the loss of natural habitats like hedgerows and wetlands, and earlier planting and harvesting.

Further investigation is required to understand the complex effects of agricultural practices on breeding success, body condition, and survival of species such as swallows, although studies suggest that agricultural intensity may negatively impact food availability.

Breeding Habitat Loss

Many bird species, including aerial insectivores, have experienced population declines due to the loss of their habitats. The reduction in nesting substrate may impact the breeding success of birds, which can be better studied in species that use man-made structures like nest boxes or chimneys. Nevertheless, numerous researches on Tree Swallows have identified a decrease in nest box occupancy, even though the number of possible nesting sites has remained constant. For example, during 5 years, there was a 19% decline in occupancy. Barn Swallows in northeastern North America may lose nesting habitat due to the disappearance of old wooden barns. Barn Swallows are more likely to be found near older barns in Italy, and their colony size is positively correlated with the presence of these structures . Breeding habitat loss or loss of nesting structures does not seem to be a significant threat for aerial insectivores, except for a few exceptions like whip-poor-wills and some flycatchers. However, we require a better understanding of what qualifies as suitable foraging habitats for these species.

Climate Change

Shifts in bird species's distribution and earlier migration and nesting times are direct consequences of climate change. Over the 3 last 20 years, European flycatchers have been laying their eggs earlier in response to rising spring temperatures. However, their arrival dates have not changed. This has led to a decline in their population, as they are breeding at a different time than when their main food source is most abundant. (Both et al. 2006). In New Brunswick and Nova Scotia, Canada, the breeding of Barn, Tree, and Cliff Swallows (Petrochelidon pyrrhonota) has advanced by 8-10 days over the past 60 years. These populations have seen either improved or consistent reproductive success. However, Bank Swallows (Riparia riparia) have not made significant advancements in their breeding, resulting in lower success rates at all stages of breeding. Although there is some evidence to suggest that climate change may be contributing to the decline in aerial insectivore populations through changes in their seasonal cycles, the evidence is not yet strong enough to definitively establish a causal link. It is important to consider that any alterations in timing and distribution may worsen the current stressors faced by these species.

Conclusion

Insectivores could have important roles to play in future conservation actions, it is important to fully understand how they respond to human disturbance, with more information required from under-represented areas in order to gain a better understanding of how different land-use histories affect the world's ecosystems, it is important to study their response patterns. It is crucial to recognize that birds play a significant role in many ecosystems, and their ecosystem services are often overlooked and undervalued. It has thus been suggested that quantifying the services provided by birds is crucial to understand their importance for ecosystems and for the people that benefit from them.

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AURORAS AND CHAOS: THE DUAL FACE OF SOLAR STORMS

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The Earth is about to experience a celestial event that promises to dazzle our skies while potentially disrupting our technological infrastructure. A solar storm is headed our way, and it has the potential to trigger mesmerizing auroras while also posing a threat to power grids and communication systems. In this article, we will delve into the fascinating world of solar storms, their impact on our planet, and the measures we can take to mitigate their effects. Additionally, we will explore how India's Aditya L1 mission is contributing to our understanding of solar activity, bolstering our preparedness for these celestial phenomena.

Unveiling the Sun's Fury: Understanding Solar Storms

Solar storms, also known as solar flares or coronal mass ejections (CMEs), are powerful eruptions of energy and matter from the Sun's surface. These phenomena are caused by the Sun's magnetic activity and occur intermittently as part of its natural cycle. When a solar storm erupts, it releases vast amounts of charged particles, such as electrons and protons, into space.

Impact on Earth

While the Sun is approximately 93 million miles away from Earth, the effects of a solar storm can reach our planet in a matter of days. When the charged particles from a solar storm interact with Earth's magnetic field, they can create stunning displays of light in the sky, known as the Northern and Southern Lights, or auroras. These breathtaking phenomena occur near the polar regions and are a result of the charged particles colliding with gases in our atmosphere.

However, solar storms can also have fewer enchanting consequences. The influx of charged particles can disrupt the Earth's magnetosphere and lead to geomagnetic storms. These storms can interfere with radio signals, GPS navigation, and satellite communications. The most concerning impact is on our power grids.

Threat to Power Grids

Solar storms can induce electric currents in power lines and transformers on Earth. These induced currents can overload and damage critical components of electrical grids, potentially leading to widespread power outages. In extreme cases, entire regions can be left without electricity for extended periods.

The Vulnerability of Modern Tech

Our modern world is heavily reliant on technology, making us more susceptible to the disruptive effects of solar storms. A prolonged power outage can cripple essential services, disrupt communication networks, and impact economic activities. To mitigate these vulnerabilities, governments, and organizations need to develop robust strategies for space weather preparedness and resilience.

Guardians of the Grid: Protecting Power Infrastructure from Solar Storms

1. Early Warning Systems: Space agencies and meteorological organizations closely monitor the Sun's activity and issue warnings when a solar storm is imminent. Timely alerts can help power companies take precautionary measures to safeguard their grids.
2. Grid Resilience: Investing in the resilience of power grids by implementing technologies like geomagnetic disturbance monitors and protective devices can reduce the impact of solar storms on the electrical infrastructure.
3. Space Weather Research: Continued research into space weather and its effects on Earth is essential. This knowledge can lead to better prediction models and preparedness strategies.
4. Backup Systems: Critical infrastructure should have backup power systems and contingency plans in place to ensure the delivery of essential services during solar storminduced power outages.

Aditya L1 Mission

India's Aditya L1 mission plays a pivotal role in our quest to understand and predict solar storms. Launched by the Indian Space Research Organisation (ISRO) on September 2, 2023, Aditya L1 is a solar observatory designed to study the Sun's outermost layer, the corona, and its magnetic activities. Equipped with cutting-edge instruments, the mission is continuously monitoring the Sun, providing valuable data on solar flares, CMEs, and the Sun's behaviour

This continuous stream of data from Aditya L1 enhances our ability to predict solar storms more accurately. The mission also contributes to space weather research by shedding light on the dynamics of solar storms, their frequency, and their intensity. With this information, space agencies and meteorological organizations can issue timely warnings, giving critical infrastructure providers, including power companies, more time to prepare for the impact of solar storms.

The Carrington Event: A Brush with Disaster

The Carrington event of 1859 is a historical example of a massive solar storm's impact on Earth. Named after the British astronomer Richard Carrington, this solar storm was so intense that it caused telegraph systems worldwide to malfunction and even set telegraph paper on fire. Auroras were observed as far south as the Caribbean. If a similar event were to occur today, the consequences could be catastrophic, with widespread power outages and disruption of modern communication systems.

Conclusion

As Earth braces for the impending solar storm, it serves as a stark reminder of our planet's interconnectedness with the cosmos. While these celestial events offer us the mesmerizing beauty of auroras, they also underscore our dependence on technology and the need for preparedness. By investing in early warning systems, grid resilience, and leveraging missions like Aditya L1, we can mitigate the potential impact of solar storms, ensuring that we continue to marvel at the wonders of the universe while safeguarding our technological advancements.

Questions:

1. What Are Solar Storms and How Are They Caused?

- Solar storms, such as solar flares and CMEs, result from the Sun's magnetic activity and involve powerful eruptions of energy and matter from its surface.

2. What Are the Mesmerizing Effects of Solar Storms?

- Solar storms create stunning displays of light in the sky known as the Northern and Southern Lights, or auroras, near the polar regions.

3. How Do Solar Storms Affect Modern Technology?

- Solar storms can disrupt technology by interfering with radio signals, GPS navigation, satellite communications, and potentially causing power grid outages.

4. What Is the Primary Threat to Our Power Grids During Solar Storms?

- The primary threat to power grids during solar storms is induced electric currents that can overload and damage critical components.

5. How Is India's Aditya L1 Mission Contributing to Solar Storm Preparedness

- India's Aditya L1 mission contributes by providing valuable data on solar flares, CMEs, and the Sun's behaviour, which enhances our ability to predict solar storms and issue timely warnings.

6. What Lessons Can We Learn from the Carrington Event?

- The Carrington event of 1859 serves as a historical example of a massive solar storm's impact on Earth, highlighting the potential for catastrophic consequences, such as widespread power outages and communication disruptions.

7. What Measures Can We Take to Safeguard Against Solar Storms?

- Measures to safeguard against solar storms include early warning systems, grid resilience, space weather research, and the implementation of backup systems for critical infrastructure.

8. Why Is Space Weather Research Important?

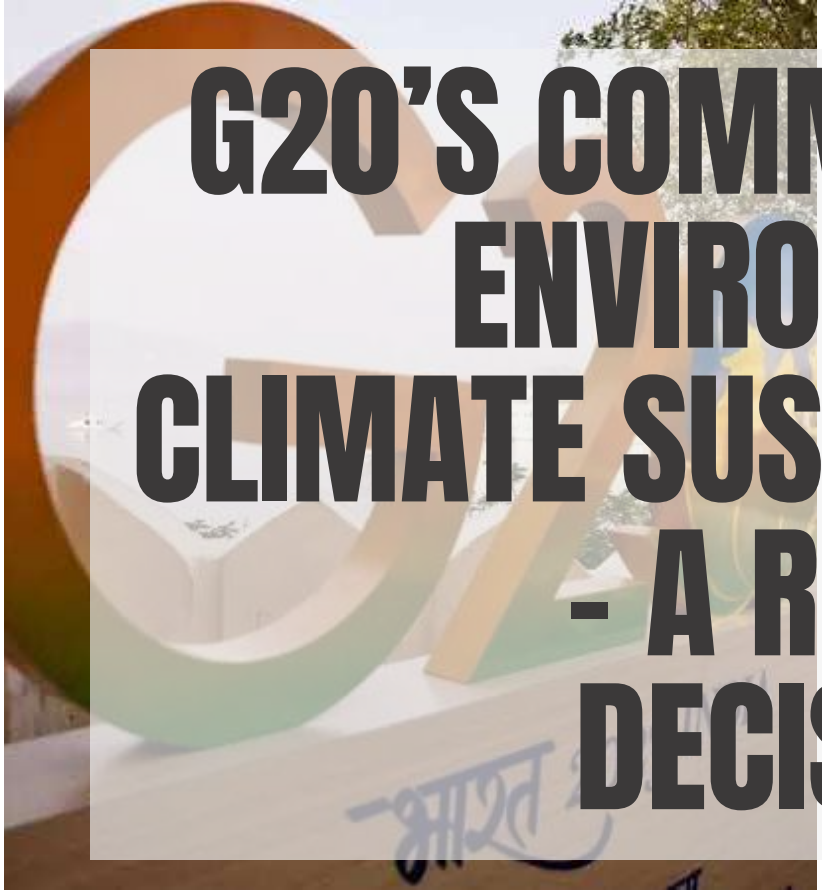
- Space weather research is vital because it deepens our understanding of solar storm dynamics, their frequency, and intensity, enabling better prediction models and preparedness strategies.

9. When Was India's Aditya L1 Mission Launched, and What Is Its Purpose?

- India's Aditya L1 mission was launched on September 2, 2023, with the purpose of studying the Sun's outermost layer, the corona, and its magnetic activities, contributing to our understanding of solar storms.

10. What Is the Ultimate Goal in Safeguarding Our Technology from Solar Storms?

- The goal in safeguarding our technology is to ensure the continued functioning of essential services, communication networks, and economic activities while preserving our connection with the cosmos through marvelling at natural phenomena like auroras



G20'S COMMITMENT TO ENVIRONMENT AND CLIMATE SUSTAINABILITY - A ROADMAP TO DECISIVE ACTION

G20 countries are home to two-thirds of the world's population, 85% of global GDP, 75% of international trade, and account for around 45% of coastlines and over 21% of the Exclusive Economic Zone. In this context, the collective resolve towards Environment and Climate Sustainability has been rightly recognised as a key priority under the G20, to secure a better future for our planet and people across the planet.

Under its Presidency, India is hosting the 4th Environment and Climate Sustainability Ministerial meeting today in Chennai. Prior to the fourth and final meeting in Chennai, three meetings of the ECSWG have been held in Bengaluru, Gandhinagar and Mumbai.

The G20 nations participating in the Environment and Climate Sustainability Working Group, have shown an unwavering commitment towards achieving environmental sustainability, since the inception of the Indian Presidency. Across the three working group meetings and various inter-sessional meetings, the vision of the Narendra Modi-led Indian government, which includes the need to focus on solutions in order to address climate and environmental issues in an ambitious and decisive manner, has found resonance. The discussions held during the working group meetings focused on innovative themes and best practices for the restoration of land and maintenance of water security and aimed at fostering collaborative partnerships to combat climate change.

The G20 is a suitable platform for multilateral cooperation, bringing together the world's major economies to collectively address the interconnected climate and environmental concerns. As a country, we have taken several pro-environment initiatives and actions. Just to list a few, India has banned single-use plastics, notified the Extended Producer Responsibility and E-Waste Management rules, achieved the ethanol blending target ahead of schedule and is working on the development of the Green Credit programme integrating the principles of LiFE into economic activities, among others. On the wildlife conservation front too, there have been notable achievements. Due to the success of Project Tiger, India, is now home to 70% of the world's tiger population. Similarly, our nation houses 60% of the Asiatic elephant population.

Taking forward the mantra of working jointly and collectively to realise common goals on the environment and climate front, PM Modi envisioned and launched the International Solar Alliance (ISA), Coalition of Disaster Resilient Infrastructure (CDRI), Mission LiFE and the International Big Cat Alliance (IBCA).

The ECSWG meetings build on the precedence set by past presidencies. Our focus on Land Degradation, Ocean 20 Dialogue, Resource efficiency, and Water management, is a testimony to that.

By fostering collaboration among member nations, international organizations, and other stakeholders, the deliberations around Arresting Land Degradation, Accelerating Ecosystem Restoration and Enriching Biodiversity; Pursuing Sustainable and Climate-Resilient Water Resource Management; Promoting a Sustainable and Climate Resilient Blue/Ocean-based Economy and Encouraging Resource Efficiency and Circular Economy, the G20 has displayed a sense of urgency towards battling the severe environment and climate challenges that the world is facing.

During the discussions, focus was given to ways and means of addressing land degradation due to forest fires and mining. The G20 countries came together to share best practices related to the restoration of these landscapes. A compendium of the same is going to serve as a ready reckoner for all countries. Water resource management issues were discussed and the G20 countries came together to discuss sustainable water management and share best practices.

Under the theme of Blue/Ocean-based Economy, discussions have been held to evolve the High Level principles which would help countries transition to a sustainable and resilient Blue/Ocean-based Economy. The principles will guide further development of action-oriented strategies for the Blue/Ocean-based Economy that can contribute to sustainable development, poverty alleviation, and the conservation of marine ecosystems.

The concept of a circular economy is a key driver of sustainable development. India's G20 Presidency focused on priority areas related to Steel, Extended Produce Responsibility and Circular Bio-economy, under the Resource Efficiency theme. The establishment of Resource Efficiency and Circular Economy Industry Coalition, is envisaged as a global, cross-sectoral and industry led initiative to enhance on-ground action for technical knowledge – based and financial collaboration.

Throughout the working group meeting, G20's commitment to multilateralism and cooperation was reaffirmed. It was acknowledged that no single nation can address environmental challenges in isolation. Collaboration among member nations, international organizations, and stakeholders is crucial to achieving the larger shared goals. The concept of LiFE or 'Lifestyle for Environment' – promoted by the Indian Presidency was highlighted across all the priority areas identified under the ECSWG.

The outcomes from the ECSWG reflect the collective determination of G20 countries to foster partnerships, exchange best practices, and leverage collective action to tackle climate change and environmental concerns effectively.

The discussions and the outcomes represent significant milestones that can potentially be markers to measure progress on initial areas. The development of comprehensive policy frameworks integrates environmental considerations into national and international agendas. By aligning policies with our shared environmental objectives, we can drive systemic change and foster sustainable development. As trustees of the planet, we need to show our collective determination for taking decisive action that alone can safeguard the planet for future generations.

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SOURCE: HTTPS://BLOG.MYGOV.IN/EDITORIAL/G20S-COMMITMENT-TO-ENVIRONMENT-AND-CLIMATE-SUSTAINABILITY-A-ROADMAP-TO-DECISIVE-ACTION/

MOVIE
RECOMMENDATION

EYES OF THE ORANGUTAN (2021)

Release date: July 7th 2021

Directed by
Will Foster-Grundy
Chris Scarffe

Produced by
Sabine Holzer
Susanne Lummer

Synopsis

Every year, millions of people travel the world to get their fix of the cute, the cuddly, and the charismatic. We take our families to zoos, ride on the back of elephants, visit dolphin shows at aquariums, and watch animals perform tricks at circuses.

Wildlife Tourism is a global, multi-billion dollar industry. But these profits don't come without costs. In front of our eyes, and behind closed doors, lie stories of abuse and cruelty.

Aaron Gekoski is an internationally acclaimed photojournalist who has spent more than a decade documenting human-animal conflict. Over recent years he's turned his lens on the Wildlife Tourism industry; a mission that's taken him to dozens of countries.

But it was a trip to Vietnam that changed everything. At an amusement park in Ho Chi Minh, he spent time with a large male orangutan. Kept in a 4x5m enclosure, the orangutan had little more than two boulders for stimulation, no trees to climb, no place to escape the glare of visitors.

Orangutans are star attractions at Wildlife Tourism attractions. Sharing 97% of our DNA, they are sentient and intelligent animals. When kept in captivity, at places that cannot cater to their complex physical and emotional needs, they often suffer from stress and depression. On their journey, the team witnesses untold pain and suffering. Thankfully, there are groups working to mitigate this crisis. At Borneo Orangutan Survival Foundation, they meet local heroes who rescue and rehabilitate rescued orangutans, ready for release back into the wild. This is a story of hope, set within the dark heart of the Wildlife Tourism industry.

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"Ode to the Universe: A Cosmic Ballet"

In the vast expanse of the universe's embrace,
Countless galaxies twirl in celestial grace.
Stars ignite like candles in the cosmic night,
Their radiant glow a breathtaking sight.

Planets, moons, and comets, they all dance,
In this cosmic symphony, they find their chance,
To orbit and wander, in orbits they swoon,
In the boundless canvas of the cosmic monsoon.

Nebulas of colors, a painter's dream,
In the cosmic workshop, they constantly gleam.
Black holes, mysterious and dark as night,
Swallowing light, bending spacetime's light.

The universe, a mystery, so vast and grand,
A tapestry of wonders, as we stand,
On this pale blue dot, our home so dear,
In the cosmic story, we all appear.

So let us ponder, with awe and grace,
The universe's beauty, in this boundless space.
For in its mysteries, we find our place,
A speck in the cosmos, a wondrous chase.

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PRIME MINISTER NARENDRA MODI LAUNCHED THE 'GLOBAL BIOFUELS ALLIANCE' WITH UNITED STATES PRESIDENT JOE BIDEN AND BRAZILIAN PRESIDENT LUIZ INACIO LULA DA SILVA IN NEW DELHI ON SEPTEMBER 10, 2023. PHOTO: X/@WHITEHOUSE VIA ANI

STAY TUNED FOR OUR UPCOMING VERSION TO MORE ABOUT BIOFUEL ALLIANCE.....

MAGAZINE TEAM

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