



HEAT RESPONSE | BOOK REVIEW | RIDDLE

gobar times

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A DOWN TO EARTH SUPPLEMENT FOR THE YOUNG AND CURIOUS



No bat-shaming, please!

Bats are more than just virus carriers.
As pollinators, they help us produce
many of our favourite fruits!



gobar times
A DOWN TO EARTH SUPPLEMENT FOR THE YOUNG AND CURIOUS

Join the environment e-summer camp with us!



**For
Classes
3rd to 8th**

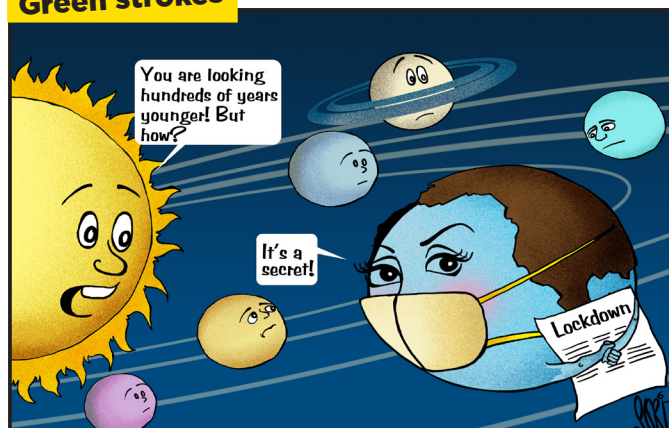
Gobar Times in collaboration with the Green Schools Programme will be organising a series of online workshops from June 1 to June 5.

Join us in our five-day marathon culminating on the World Environment Day, celebrated on June 5 each year.

There will be quiz, stories and photography workshops. Discover the basics of news writing and script writing; and tune in for a quick course on how to make comics.

For more details, visit <https://www.downtoearth.org.in/category/young>

Green strokes



Lessons from past pandemics

Pandemics are not new to us. The outbreak of different diseases in different centuries is well-documented and so is our response to them. And if we review the way we have handled diseases in the past, we may see a pattern.

It's like the re-telling of an old story. The name of the disease, pathogen and mortality numbers change. For example, recurrent plague outbreaks have been named differently. The "Justinian plague" (541-542 AD), "Cyprian plague" (249-262 AD) and "Black Death" (1346-1353) refer to plague outbreaks that have occurred in different time periods.

However, there were also some common features throughout the ages irrespective of the disease, pathogen, or era. For example, every time our initial response to a pandemic has been characterised by a casual approach towards the disease. And as the situation became worse, we have slipped into panic. And more often than not, superstition has added fuel to this panic. For example, people in the past have resorted to flogging themselves in public because they thought that their disease was a form of divine punishment for their sins.

Also among the stock responses of humans is the hunt for a culprit. While one group blames the other for the catastrophe, it's the weak and poor who lose the most.

Even today, when the world is battling the COVID-19 pandemic, we have stuck to our old ways. We have identified the pathogen as the SARS-CoV-2 virus and after a casual approach in the beginning, we have also slipped into a state of panic. And this time we have identified the bat as a culprit.

So here it goes—lights, sound, camera....allegations!
Let's have a trial of a bat.



Dear GT,

I was happy that my testimony was featured in GT's May 2020 edition. The lockdown period has been difficult for many of us and I am happy that I got to share my experience with the world. "Days of confinement" or the testimonies of children from different parts of the country also made me aware of their issues. I hope that this crisis ends soon and all of us are able to live the way we want to.

Vignesh, New Delhi

We are waiting for your letters, responses and stories. Send them to Sorit Gupto, Editor, Gobar Times, 41, Tughlakabad Institutional Area, New Delhi-110062.

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Freeze Frame by Vikas Choudhary



Keeping our loved ones safe: A fruit vendor in New Delhi adjusts a street dog's mask during lockdown imposed to contain the spread of COVID-19

This space is for young and budding wildlife photographers who wish share their work with us!

Send your best clicks to sorit@cseindia.org

Digits speak

Globally, natural disasters caused around 2.5 crore displacements in 2019. The data was shared by a UNICEF report that alarmed the world of the risks and challenges faced by children around the world. Here are a few findings of the report:

82 lakh

children were displaced due to disaster-related causes in 2019

50 crore

children were living in areas with very high risk of flooding as of 2019

16 crore

children were living in areas of extreme or high risk of drought as of 2019

Source: Lost at home: The risks and challenges for internally displaced children and the urgent actions needed to protect them, UNICEF (May 5, 2020)

A royal nap

South Africa's Kruger National Park is usually teeming with tourists. On March 25, 2020 when the country issued lockdown orders, park authorities closed the gates of the national park, barring the entry of tourists. A pride of lions, it seems, decided to make the most of this opportunity by taking a nap on a deserted road within the national park. Richard Sowry, a park ranger, was able to capture the image of lions lounging on the road on April 15, 2020. "This lion pride is usually resident on Kempiana Contractual Park, an area Kruger tourists do not see," said Kruger Park authorities while sharing the image on the social media platform Twitter.



Bihar's water miracle

Groundwater levels in the state of Bihar increased by around 4 metres in 2020 over a period of one year, according to a survey report conducted by the Public Health Engineering Department (PHED). This is great



news since in 2019, the increase in groundwater level in the state was less than half a metre, added the report. The increase has been attributed to the amount of rainfall recorded in the state

in 2019-20. Apart from the timely post-monsoon rains in December, January and February, the state recorded untimely heavy rains in March as well. And thanks to the lockdown, there was a sharp decline in the extraction of groundwater for irrigation in agricultural fields. Several states, including Bihar, have subsequently reported an increase in groundwater levels.

You must change your ways. Losing my future is not like losing an election, or a few points on the stock market.

Severn Suzuki of Canada earned global repute as a 12-year-old for delivering a powerful speech during the 1992 Earth Summit organised by the United Nations at Rio de Janeiro, Brazil

Indian poet who wrote the Earth Anthem

Since 1974, June 5 is celebrated every year as the World Environment Day. The date, marking the first day of the 1972 Stockholm Conference on the Human Environment, was fixed by the UN General Assembly. From plastic pollution to the impact of food waste, the day usually involves a series of activities and programmes to raise awareness about environmental issues.

In 2008, Indian poet diplomat Abhay Kumar wrote a poem called the Earth Anthem to pay tribute to Mother Earth. It eulogises the beauty and diversity of our home planet.

Since then, the anthem has been translated in over 50 languages, meaning more than

90 per cent of humanity can understand it. The poem has also been put to music by the famous violinist L Subramaniam, who is also from India. And in June 2017, this musical rendition of Kumar's poem was sung by the equally renowned singer Kavita Krishnamurti for the first time at the Symphonic Orchestra of Brasilia.

The poem-song has become part of a global language shared by the environmentally conscious populations of the world. Thousands of schools across the globe sing it on different occasions and events like Earth Day, observed on April 22 every year, and World Environment Day. Recently, the United Nations (UN) featured it as part of their celebrations marking the 50th anniversary of the Earth Day in 2020.



HOW IS HAIL FORMED?

Hailstorms are common in India during the pre-monsoon season but a rise in their frequency is worrisome

Sorit Gupto

During a storm, frozen droplets begin to fall but they are pushed back by a strong updraft of wind

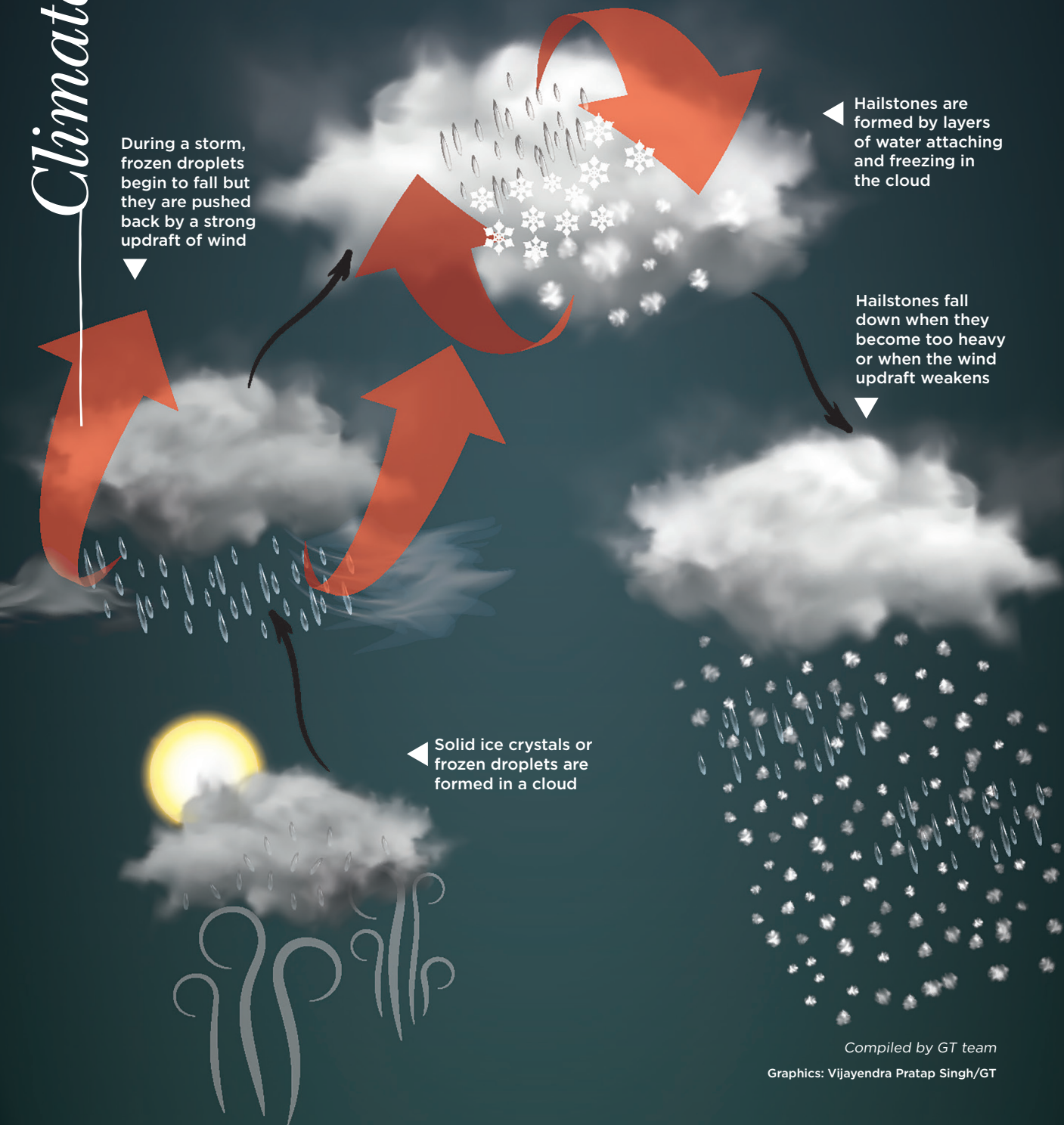
Hailstones are formed by layers of water attaching and freezing in the cloud

Hailstones fall down when they become too heavy or when the wind updraft weakens

Solid ice crystals or frozen droplets are formed in a cloud

Compiled by GT team

Graphics: Vijayendra Pratap Singh/GT



In the first week of May 2020, the streets of Uttar Pradesh's Noida city were covered in a thick layer of hail. It seemed like a white carpet had been spread out by Nature and the city was transformed into a snowy town. For those missing the winter season, this freak weather event may seem like a blessing but in reality, hailstorms do more harm than good.

If you ask farmers, they would probably say that there is nothing worse than a hailstorm. Why? This is because like any other extreme weather event, hailstorms destroy vast areas of standing crops every year. Much of the damage, especially to plants and animals, is because of these icy stones that usually measure between 5 millimetres and 15 centimetres in diameter, and can be round or jagged.

Hailstones are produced in strong convective storms with deep clouds having large amounts of moisture and intense currents of rising air. The lifting of air (convection) due to higher temperatures in

the summer season is one of the main factors leading to the formation of a storm. Convective storms allow for hailstones to grow because the hailstones repeatedly rise and fall within the cloud by moving between regions of rising and falling air. Once the hailstones grow sufficiently big, their weight



overcomes the force of the rising air and they fall out of the cloud.

There are many examples of hailstorm activity across India. On February 1988, hail weighing up to 2-3 kilogrammes were reported in Odisha's Puri and Sambalpur regions.

A severe hailstorm near Moradabad, Uttar Pradesh on April 1888 is considered to be one of the worst-recorded hail events in the country. The 1888 hail event, which claimed nearly 250 lives, has been included in the list of all-time deadly weather events compiled by the World Meteorological

Organisation (WMO) Archive of Weather and Climate Extremes.

So, is there any connection between hailstorms and global warming? Yes. Global warming leads to warmer atmosphere, which can hold higher amounts of moisture. Increased quantities of moisture in the air in a warmer future can lead to heavier rain or hail precipitation during a storm. Some studies have also found a correlation between

frequency of reported hail damage and rising temperature over some parts of the world. But we need more scientific research to understand how the occurrence and intensity of hailstorms will change in India with rising temperatures. ⚡

Word stock

Dew point

is the temperature at which the condensation of water vapour into liquid takes place

Action

Swabhiman is a New delhi-based non profit that provides support to people living in disaster-affected regions in India

Visit: <https://www.smilefoundationindia.org/>

Weather news

Rainfall and gusty winds, associated with a western disturbance, kept temperatures relatively low in northern India in the first week of May 2020



Re-wild now

It's time to build a resilient, sustainable future and embrace all inhabitants of this beautiful planet

Preeti Bathla

It feels unusually pleasant to hear the morning chorus of melodious *bulbuls* and *mynas*, serenading cuckoos and squabbling squirrels and parrots. These days, we are welcoming new visitors like the sunbirds and rosy starlings in Delhi. These birds have also been very accepting of us—paying us personal visits and pouncing on the food we offer to them. And then, we see mask-wearing individuals on the road. That's when we realise the cost of these mellifluous sounds and clean surroundings.

With the uninvited COVID-19 pandemic taking lives of lakhs of people worldwide and shutting down economies, it seems the angry Mother Nature has taken control of the situation in her hands to bring balance in biodiversity. In the first few days of the lockdown imposed in several countries, there were sightings of animals, coming out of the wild to replace humans on streets and beaches. Few more days passed, and the rivers seemed purer; even the air pollution levels declined.

This year's World Environment Day, which will be celebrated on June 5, 2020, focuses on celebrating biodiversity. The year, being the last year of United Nations Decade on Biodiversity (2011 – 2020), was considered crucial to set the tone for environment actions in the coming years. But COVID-19 has put a halt to these plans and derailed all discussions and negotiations on the global biodiversity framework. While this pandemic is seen as a threat to the momentum of addressing

Did you know?



◆ India has 870 protected zones, including 104 national parks, 551 wildlife sanctuaries, 127 community reserves and 88 conservation reserves, covering 5.02 per cent of the total land area.

◆ With only 2.4 per cent of the world's land area, India accounts for 7-8 per cent of all recorded species (45,000 plants species and 91,000 animal species).

◆ Out of 34 globally identified biodiversity hotspots, four (Himalayas, the Western Ghats, the North-East, and the Nicobar Islands) are in India.

◆ In just over 40 years, there has been 60 per cent decline in the population sizes of mammals, birds, fish, reptiles, and amphibians.

the biodiversity crises, it has also opened up many opportunities to look at these emergencies.

Biodiversity and zoonosis

When the whole world is trying to unlock the mystery behind the origin of COVID-19 virus, a reminder of the 2015 announcement of the United Nations Environment Programme (UNEP) that 75 per cent of all emerging infectious human diseases are caused by “zoonosis”, or an infection transmitted from animals to humans, can help us get a grip of reality. UNEP had also said that zoonotic diseases like Ebola, Middle East Respiratory Syndrome (MERS), Zika and Nipah are closely intertwined with the ecosystem health.

The increase in the incidences of zoonosis, to a significant extent, is a reflection

of the change in our interactions with our forest ecosystems. Biodiversity and habitat destruction, illegal wild life trade, global heating, noxious pollution and urbanisation can be considered responsible for breaking the ancient symbiotic relationship between Nature and us. A critical question to ask ourselves at such a time is that how do we create a balance between our need and greed?

A tiny virus called SARS-CoV-2 has brought the entire human race down on knees. And who knows if it's the last pandemic for us? The future is still unfolded! It's time to build a resilient and sustainable future and embrace everyone present on this beautiful planet.

Vasudhaiva Kutumbakam

In other words, it is time to come together and join hands

to restore the degrading biodiversity. This period has taught us that we don't need the quarantined buildings or the standing fancy cars around us, it's the comfort of meeting that one special friend or relative, the chirping of birds when we wake up and the clean air and pleasant breeze—this is the freedom that we truly desire. And that's what you want more than the sound of crackers or the fuel-guzzling beasts. Each one of you has an eco-warrior inside, EMBRACE IT FOREVER. Respect the flora and fauna around you, treat them as equals and in exchange, Nature will bestow its blessing upon you. ♡

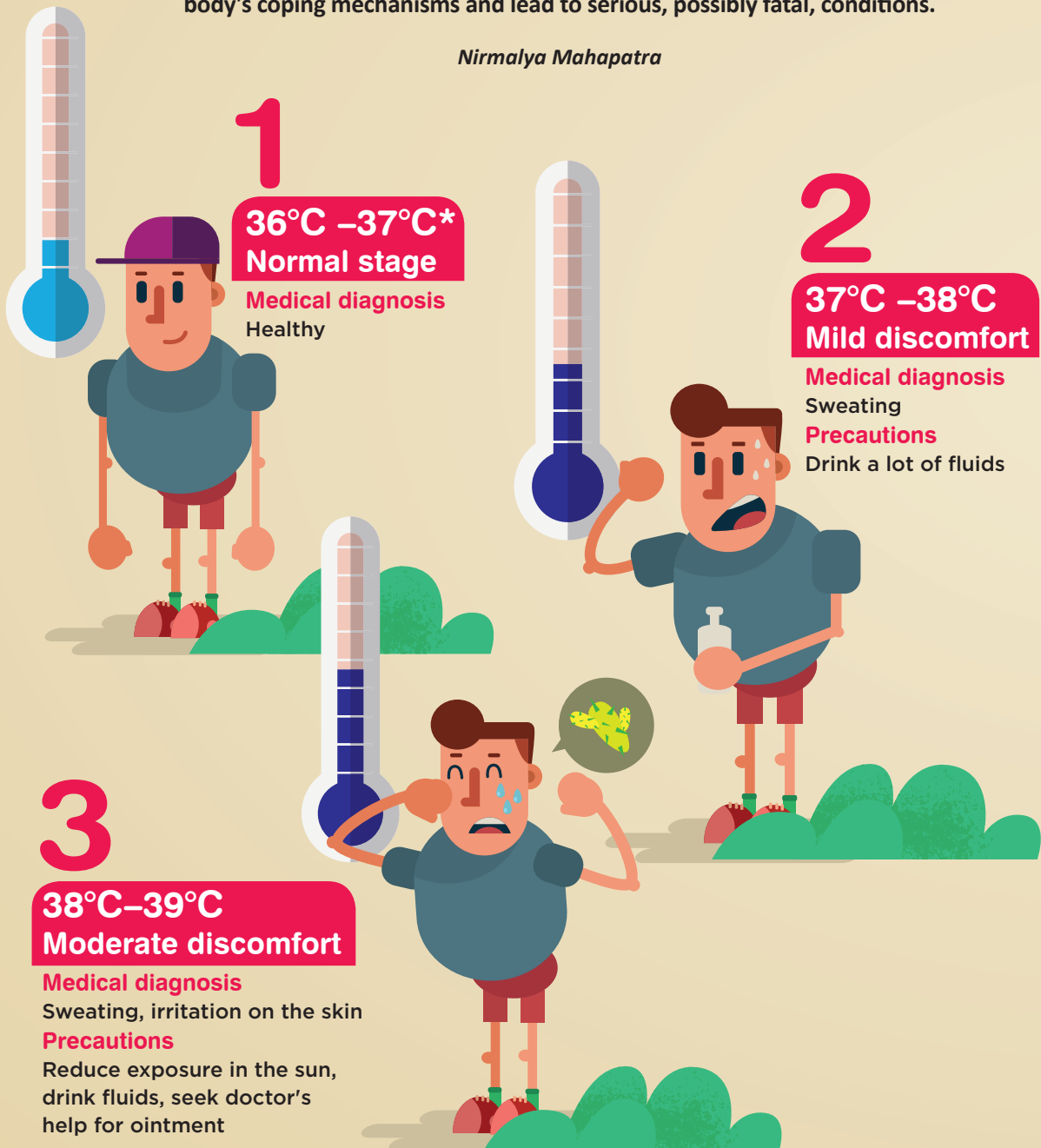
**For further queries, reach out to us at support@greenschoolsprogramme.org*

ON THE WALL

Human body's response to heat

The healthy human body maintains its core temperature roughly at 37°C or 98.6°F, optimum for us to function. Whatever be the outside temperature, the internal thermostat located in the brain ensures that this core body temperature is maintained. However, very hot environments can overwhelm the body's coping mechanisms and lead to serious, possibly fatal, conditions.

Nirmalya Mahapatra





4

39°C –40°C Extreme discomfort

Medical diagnosis

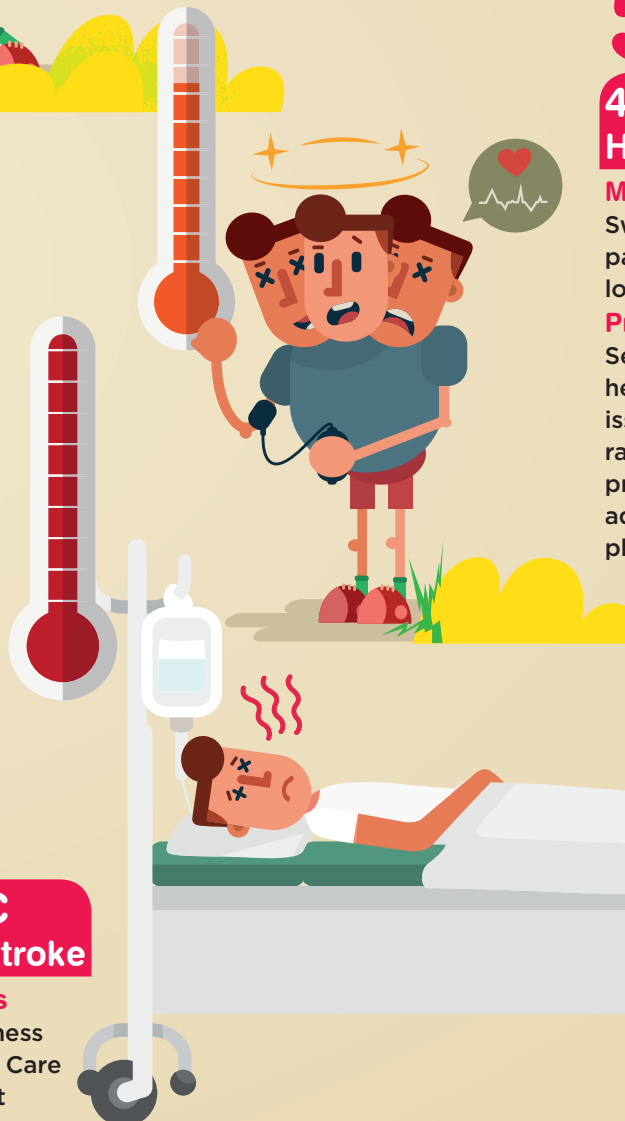
Sweating, irritation on the skin, rashes, weakness

Precautions

Avoid physical exertion and take rest. Take electrolyte solution to boost energy and drink more fluids.

*Core body is measured through rectal thermometer

Note: Most people feel comfortable when the air temperature is 20°C-27°C and when the relative humidity is 35 to 60 per cent. When air temperature or humidity is higher, people feel uncomfortable.



5

40°C –41°C Heat stroke

Medical diagnosis

Sweating, weakness, muscle pain, anxiety, headache, low BP

Precautions

Seek medical help for heatwave related health issues like muscle pain, rashes and headache. Other precautions involve taking adequate rest, avoiding physical work and drinking fluids. Ice pack treatment for muscle pain works

6

Above 41°C Severe heat stroke

Medical diagnosis

Loss of consciousness or coma. Intensive Care Unit (ICU) treatment required

The trial

**Some trace the origin of COVID-19 virus to bats
but these creatures of the night are more than virus carriers**

Sorit Gupto & Pallavi Ghosh

It was a normal day in the courtroom. The judge entered, took his seat and checked his gavel by thumping it on his desk before saying, "Let the proceeding begin. Today the court will hear the case in-between Mr Bat and human beings. Mr Bat please come into the witness box and take the seat."

The attorneys were then asked to start the proceedings.

The opening statement was made by the lawyer representing the humans. "My lordship! Today is a very important day in the history of the world. All of us present in this courtroom are aware of the fact that

the future of immunity is at stake because of the peculiar coronavirus and we have found out the real culprit responsible for its spread. It is none other than the ugly, weird and creepy creature known as the bat!" said the lawyer.

"I object, my lord!" shouted Mr Bat from the witness box. "The prosecutor has no right to use derogatory and demeaning words against me. After all beauty is in the eyes of the beholder!"

"Objection sustained," said the judge. "Please don't use such words in the courtroom," warned the judge.

"I am sorry, sir!" said the prosecutor.

"But I would like to point out

a number of strange and unusual characteristics of the bats. These include a few characteristics that are uncommon in the animal kingdom. For example, bats are the only mammals that can fly. They live upside down and suck blood from other animals like mosquitoes! Vampires! Eek!" said the prosecutor.

"Mr Bat, do you want to say something in your defense?" the judge said.

Mr Bat nodded and said, "My lordship! It was the night of March 24. I woke up to a different world when I came out of my cave along with thousands of other bats in search of food. I was surprised to see that wild animals were strutting the



streets in the city. Humans were nowhere to be seen! Later we were asked to return back to our caves as humans were angry at us and wanted to kill us! We were surprised to hear this.”

“As we were asked we went back to our cave, where I found that a few officials were waiting for me. They had already arrested some bats and they arrested me too. An FIR was registered against us and we were accused of being the prime conspirators of a disease that has killed lakhs!”

“So, do you wish to challenge these allegations in court?” asked the judge.

“Yes, but let me clarify and refute each allegation one by one,” said Mr Bat.

“The first allegation against us is that we, the bats, are ugly and creepy. For that I just have to say that we are beautiful in our own way and we don’t care what others think about us. There is a general perception among humans that bats are

scary, strange and dangerous.

However, of the over 1,200 bat species, only three are vampire bats. Of these three species, only one prefers the blood of mammals, and even these bats mostly feed on cattle,” said Mr Bat.

After a brief pause, he went on, “Maybe this doesn’t seem so great, my lordship, but vampire bats can be of great help to humans. A chemical known as desmoteplase, which is found in the saliva, of the vampire bat, helps break down blood clots. It is also used for medicinal purposes, especially to treat patients who have suffered from a heart attack.”

There was pin drop silence in the courtroom.

“Now, coming to the real importance of bats. My lordship! Bats are one of Nature’s best pesticides. Almost 70 per cent of bat species feed on insects and help control the real vampires: mosquitoes, whose nasty bites are not just

annoying but spread diseases, like the West Nile virus!” Mr Bat said.

“I object, my lord,” said the prosecutor but the judge over-ruled his objection and asked Mr Bat to continue with his defence.

“Thank you, my lord! As I was saying, a single little brown bat can eat around 1,000 insects every hour, and a colony of Mexican free-tailed bats can eat several tonnes of moths in just one night. Just calculate how much pesticide would be needed for the same? And please don’t forget to calculate the price we paid in the form of ecological destruction and soil pollution because of the use of harmful chemical pesticides,” Mr Bat said.

“Your lordship! We, the bats, are also master pollinators. Fruit bats, also called mega bats because of their large size, are important for their role in plant pollination. For example, the cave nectar bat is the only



Mann ki baat, courtesy Mr Bat



Our immunity system is so strong that despite carrying a lot of viruses we do not fall sick.

In fact, some scientists are studying our immune system in the hope that it may help humans protect themselves from form a host of diseases.



Much like my brothers and sisters, I am an introvert. And we have no interest in interacting with humans who are accusing us of spreading diseases today!

But when humans come and destroy our homes—mangroves, old-growth forests and caves—these viruses are transferred to them and they fall sick.



pollinator of the durian fruit in Southeast Asia. Other bats pollinate peaches, bananas and the agave plants. Without the cave nectar bats, many of our food plants would be unable to produce the tasty fruits you humans enjoy,” said Mr Bat.

“I am impressed!” said the judge.

“Don’t try to fool the court by advertising yourself as pollinators and insect-eaters you creepy creatures!” shouted the prosecutor. “Can you please inform the court about your virus-carrying ability Mr Bat?” the prosecutor said aloud.

Mr Bat responded calmly and said, “Your lordship, many people worry about getting infected by bats. For example, take the rabies virus. It is true that bats can be

carriers of this disease-causing virus but the same is true for many other animals like dogs, cats, raccoons, skunks and foxes. In reality, less than 0.5 per cent of all bats carry this virus. Now-a-days we are held responsible for nurturing and spreading the virus that caused the COVID-19 pandemic. But it’s the humans and not the bats who are the main culprits. In the name of development, humans keep destroying our natural habitats. Bats all over the world are threatened by the damage done to the mangrove swamps, old-growth forests and of course, bat caves—our homes!

There was no objection from the prosecutor this time.

Mr Bat continued to speak in his defence and said, “Next comes

the human-induced climate change and habitat destruction. For example, a record heat wave in Australia caused over 1 lakh bats to die from heat exhaustion in January 2014. It is known that zoonotic diseases or diseases caused by direct contact with wild animals are triggered by the destruction of forests. So my lordship, we, the bats, are the victims of human aggression and it is us who need to be saved.”

The prosecutor remained silent. The judge considered the arguments of both the sides and replied, “This court is of the opinion that it is the humans who are the biggest threats to life on Earth. The court orders humans to act responsibly and avoid any conflict with Nature in the name of economic growth.” 4

Let's get real about brain boosters

So far, only one study has claimed that increasing "fluid intelligence" is possible

Several scientists have toyed with the idea but there is very little evidence to show that this is indeed possible. In his book *Science Tales: Writings on the interplay of science, history, gender, culture and politics*, Rakesh Kalshian has shared his thoughts on the subject. There are certainly a slew of therapies for those interested in spiking their Intelligence Quotient (IQ). These include dietary supplements that claim to push the limits of cognition, video game websites that promise to amp up one's brain power and

headsets that seduce intelligence by dunking the wearer's head in a sea of gentle electrical ripples. However, for Kalshian, regardless of whether these methods enhance intelligence or not, the question we must ask is: what does it mean to "get smarter"? Anything anyone might do to the body or the brain—pump iron, practice yoga, eat superfoods or solve brainteasers—has an effect, imagined or real, he adds.

The trouble is that while doing something more frequently may sharpen a particular skill such as solving

a cryptic crossword, it doesn't make you better in other pursuits such as fencing or dumb charades.

So when scientists talk of boosting intelligence, what they mean is "fluid intelligence", a far more sophisticated general acumen that enables its owner to solve complex problems using a mix of memory and knowledge. However, the most common measure of this kind of intelligence is the IQ test, which in itself, is controversial for its inherent racial and cultural biases, Kalshian notes.

So can we enhance fluid intelligence? Curiously, so far only one study, carried out by Swiss researchers, claims to have done so. Essentially, they subjected a group of students to a series of cognitive tests of increasing difficulty. They found to their surprise that solving harder problems somehow resulted in greater fluid intelligence. However, many subsequent studies failed to replicate it.

For now, ordinary mortals seized with intelligence-envy would do well to follow the age-old nostrum of "eat well, exercise well, sleep well" in order to lead a contented life. Alternatively, they can console themselves by the idea, put forward by a Stanford University geneticist, that human intelligence "peaked thousands of years ago and we've been on an intellectual and emotional decline ever since".



The globe-trotting chicken's ancestor

Indians were probably the first to domesticate the red jungle fowl and realise its medicinal and nutritional worth

Long before the birth of Christ, a bird, never seen before in the valley of the Blue Nile, reached the court of the pharaohs. Neither the architectural grandeur of the court nor the "gold-draped" Pharaohs could silhouette its beauty. A bright red comb rested regally on its head and shiny green and red feathers clothed its body finally ending in an eclipse plume. The

Egyptians had never seen a bird which laid so many eggs. When it crowed, they listened with rapt attention. When it walked around the court, everyone made way. It became a

showpiece in the Pharaoh's court. Fascinated, they adopted the bird.

Everybody used to be shown the chicken and training camps were set up on how to get this wild red jungle fowl (RJF) to lay eggs.

But much before the bird reached Egypt, the RJF (*Gallus gallus*) was probably first domesticated in the twin cities of Mohenjodaro and Harappa in the Indus valley around 2500-2100 BC. Seals were found at Mohenjodaro depicting fighting cocks. Various clay figurines of the fowl were also found, including one of a hen with a feed dish.

While most wild animals were domesticated for meat, in the case of RJF, which belongs to the family of pheasants, it was for its fighting abilities. In Bhavprakash Nighantu, a book on Ayurveda by Acharya Bhavprakash, he states that the Vedas, too, praise the fowl for its 'courage'.

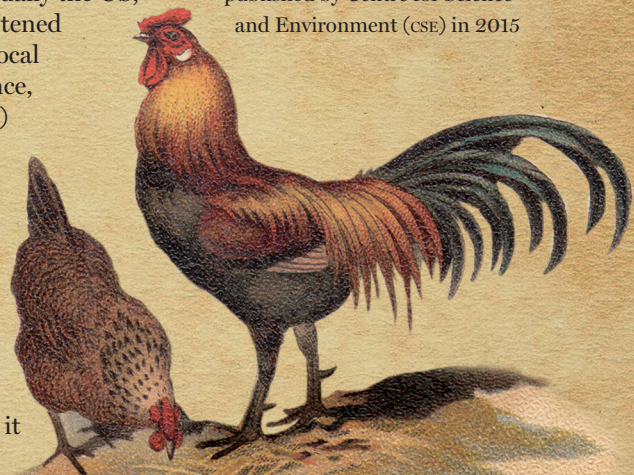
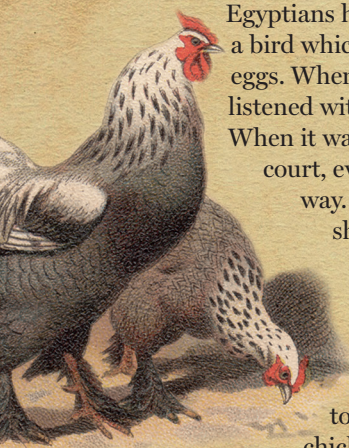
Indians were also the first to realise its medicinal and nutritional worth. Special attention has been paid to the bird in the Ayurvedic system of medicine also. "The fowl is a medicine in itself," agrees Vaidya Balendu Prakash of the Vaidya Chandra Prakash Cancer Research Foundation, Dehradun. Rich in minerals such as copper and iron, in course of time, the fowl also became a welcome bribe.

As it reached Persia (modern-day Iran), Mesopotamia (modern-day Iraq), Egypt, China, Russia, Europe and eventually the US, the fowl was christened according to the local dialect. For instance, pullet (young hen) in Latin comes from the word *pi* in Sanskrit. Similarly, chicken and cock comes from Sanskrit *kukuth* or *kukutha*. Nomenclature aside, everywhere it

went, it was regarded as a special bird.

Backyard poultry became common. Soon people started developing newer breeds with selective cross breeding with other fowls. After a long period of trial and error the Asiatic, US and English breeds of the "chicken" that we have today were finally born. Today, they feed a large percentage of the world's population.

*This extract is from the book *Environmental History Reader* published by Centre for Science and Environment (CSE) in 2015



Goodbye zoos!

The lockdown has given us an opportunity to review our take on prisons we built for our recreation

Rajat Ghai

For most of us, the lockdown imposed by the government in the wake of the novel coronavirus disease (COVID-19) has turned out to be exactly what we feared: imprisonment. Day after day of sitting home, doing work, eating and sleeping, but not being able to go out except to the local store to buy groceries and other essentials gives one a feeling of being caged.

Cage. Right. That is the word. We all are feeling as if we are in a cage made of cement, concrete, wood and metal. Worst of all, it means we will not get to experience the delights of summer, however brutal it eventually is. Going out with friends, watching a movie, even having an ice cream is now a novelty for us.

Perhaps now, we might be able to think about those poor animals whom we cage in those

modern prisons called "zoo" for our recreation and education.

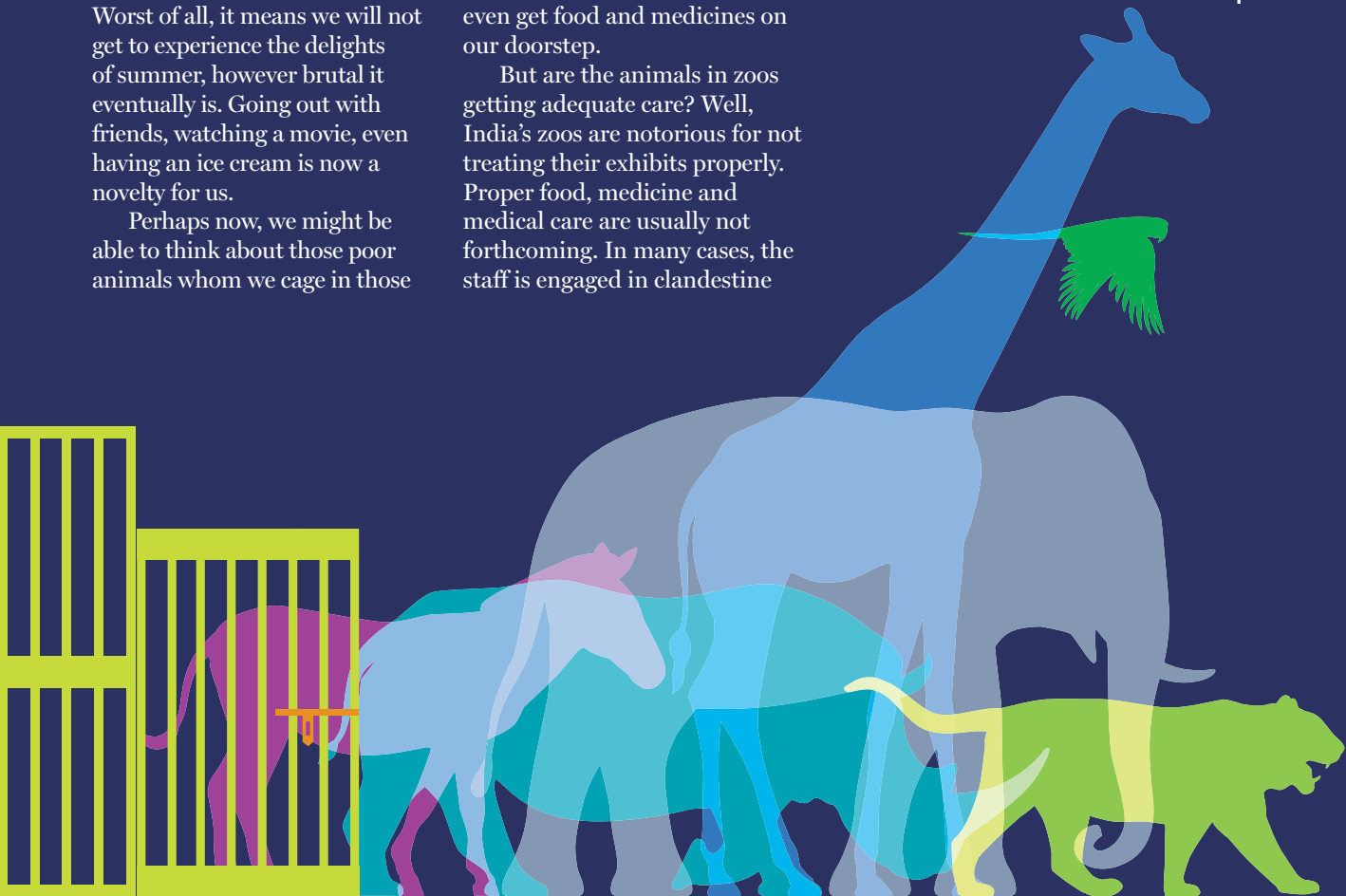
How must they feel? When we can't even tolerate a few weeks in the comfort of our homes, how can we leave them exposed to the cruelty of spending their entire lives inside a prison fashionably termed as a zoo?

In case of our current "internment", we, who are from reasonably well-to-do sections of society, have all modern amenities with us. We can surf the internet at reasonably good speed and thanks to the various e-commerce companies, we can even get food and medicines on our doorstep.

But are the animals in zoos getting adequate care? Well, India's zoos are notorious for not treating their exhibits properly. Proper food, medicine and medical care are usually not forthcoming. In many cases, the staff is engaged in clandestine

illegal trade in animal parts. One wonders what the world's caged animals are experiencing during the lockdown?

Perhaps, the lockdown is a signal to humanity to finally let go of this outdated concept of zoos. Indeed, there have been instances of criminals being granted amnesty in certain countries due to the lockdown. If we can do that, why can't we think of giving freedom to the blameless animals who are held against their will for no crime of theirs? Food for thought?



How to talk to kids about a disease?

The mystery of the missing soap can help adults have a conversation with children about COVID-19 without scaring them

Pallavi Ghosh

A disease-outbreak is always scary. Lots of people fall sick and news of deaths pour in. In other words, everywhere you look there is gloom. Talking to kids about the disease can, thus, become a challenge. However, Geeta Dharmarajan's *The mystery of the missing soap* can help adults struggling to have a conversation about the coronavirus or COVID-19 with children.

Through wit, humour and the art of story-telling, the book manages to make corona a non-scary entity much like Louie, the mosquito, from the Mortein ad. The book's

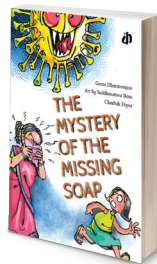
artwork by Suddhasattwa Basu and Charpak Dipta is full of bright and colourful illustrations. It lends the book a comic-book like appearance.

The story uses the village as its background with an evil Asura Tobakachi and his minions—the viruses—on one side and the residents of

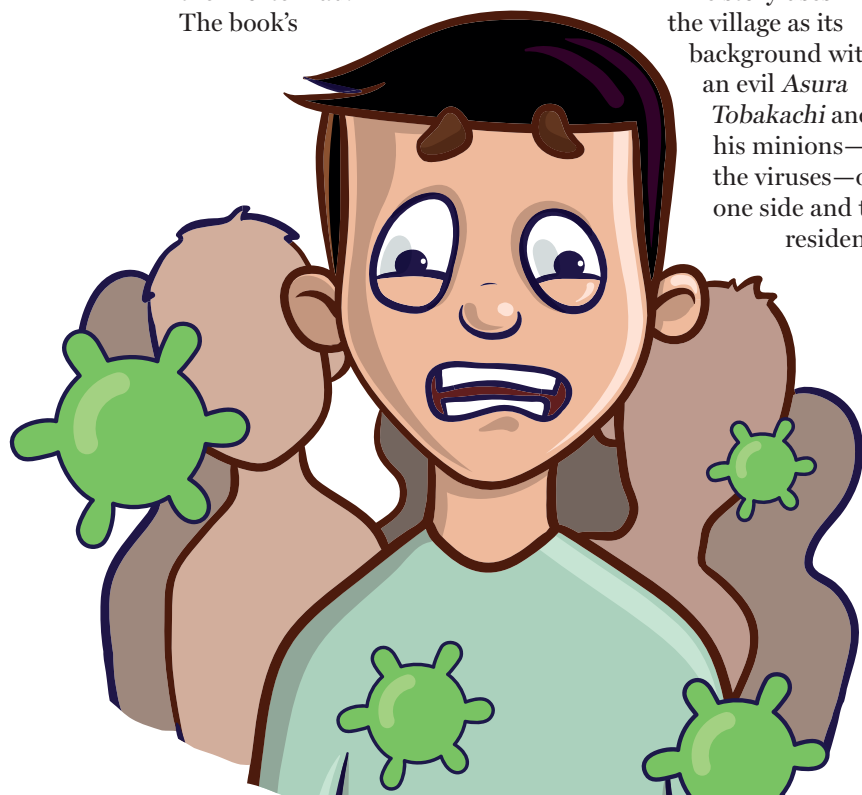
Dakshinpur village on the other. In the ensuing battle between the forces of good and evil, co-operation and self-sufficiency become paramount. And in the end, the residents of the village come together and defeat the disease-spreading virus.

Once fear is taken out of the equation, the talk about precautionary measures, referred to as the “corona culture”, of maintaining physical distance, handwashing and hygiene becomes easier. These measures find mention in the end of the book where we also get to know how to make liquid soap using *reetha* seeds.

The book's main contribution is that it shows us how to have a heart-to-heart conversation about a disease with kids. The story format has always been effective in forging a connection with a young audience and *The mystery of the missing soap* puts it to good use, that is, to eliminate fears around the coronavirus. ✦



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Guess the word

Can you guess these words using the clues given below?

Anju Subramanian

QUIZ CARD 1

1	2	3	4	5	6	7	

Clues:

1. 654: Another word for "tear"
2. 3452: Another word for "turn"
3. 356: A respectful form of address
4. **61237: Another word for wash**



QUIZ CARD 2

1	2	3	4	5	6	7	

Clues:

1. 457: A metal
2. 76: The word we use to express disagreement
3. **13257: A type of cloth**
4. 34: A preposition
5. 541: A pronoun we use to indicate the possession of a belonging



QUIZ CARD 3

1	2	3	4	5	6	7	

Clues:

1. 1264: Another word for "quick"
2. 657: When you talk, you ____ things.
3. **123: Helps you cool down**
4. 6427: You should ____ at home during lockdown.



QUIZ CARD 4

1	2	3	4	5	6	7	8

Clues:

1. **1645: A formal wear**
2. 1238: Another word for "singular"
3. 7615: A small particle
4. 345: Past tense of "light"



ANSWERS
1. Inspire
2. Station
3. Fantasy
4. Solitude

Paas Aao... na!!



Ritika Bohra /GT

Limiting physical contact and keeping a safe distance while meeting others are recommended to check the spread of the coronavirus or COVID-19 disease. A minimum distance of 6 feet, about two arms' length, should be maintained while meeting others.