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Eben Grant
We love each issue of CC Kids for a different reason—and in the case of this issue, we love it for two reasons. First, we are introducing a new section entitled ‘Emerging Voices’, where we will be featuring submissions from budding conservationists around the world. This section was inspired by our first featured author, Eben Grant. Second, we are proud to be partnering with Pratham Books to reproduce Have You Ever Climbed a Tree?, first published via their website. Pratham is a nonprofit which provides free storybooks in 21 Indian languages. CC Kids has also recently started translating select pieces into additional languages to make them accessible to a greater diversity of readers. We hope that developments like these will help introduce even more readers to the species and habitats so colourfully captured in these pages.

— Caitlin Kight & Payal Bal

Change was already taking hold of the tundra. Lichens, moss, and grasses were breaking through from underneath a thick white blanket. The new growth forming patches of earthly colour across the stark landscape. New life, fresh and full of hope, unlike his own.

Leaving the warmth of the timber research cabin, Osvald Mikhailo began the short trek across the snow towards the stand of dwarf willow. Nothing grows tall on the tundra, not even trees. It’s only a 100-metre walk, but the physical cost of Arctic life is high. The ache of cold air drawn in with every breath reminded Osvald that his body was not what it was when he took up this position thirty years earlier. He’d been full of hope and ambition back then—a young graduate presented with the opportunity of a lifetime. A remote research posting to study the most enigmatic owl in the world, Bubo scandiacus, the snowy owl.

He knew more about the snowy owl and this harsh habitat than any other scientist in the world. Moments of wonder blurred across decades of time and space. A snowy owl attacking a pair of Arctic wolves, a 10-foot polar bear loping gently by, and countless
fledglings barely a month old taking flight for the first time. Yet, a deep dissatisfaction had set in. This would be his last trek across the tundra. It was time to say goodbye.

Reaching the dwarfed forest stand, Osvald crawls into the hide. Through his binoculars he watches the familiar scene. There she sits ethereal and luminous, guarding her precious clutch of eggs. She’s pressed firmly into a depression she scraped into the wind-swept rise only weeks earlier. Her mate flies close to the ground, gliding silently until he reaches the nest. Stopping in front of her, the male owl bows and offers his catch. With a slight head bob, she accepts the lifeless brown lemming and takes it in her beak. Care and nourishment, the drivers of all life. Unfolding his broad wings, he lifts gently back into the breeze. Last season the same pair had raised and fledged five chicks. Osvald wouldn’t see this clutch hatch; that privilege would be passed on to his replacement, who was probably, Osvald thought, travelling north on a light plane from Fort Yukon right now.

He wished he could thank the owl and the generations before her for all that they had given him. But new opportunities and a life less remote were all he’d been able to think of these past months. Noting the date and time against her leg band number on his data sheet, Osvald adds a description, male provides lemming for nesting female. Placing the sheet back inside his dry pack, Osvald lifts the binocs to his face. She swivels her head and squints toward the hide. She blinks, momentarily flashing a pair of golden eyes shining across the white space between them. Standing, Osvald turns away from her for the last time and trudges slowly back toward the cabin.

Rachel Brown is a conservation project manager and published author of nature-focussed fiction and nonfiction stories. She is equally passionate about wildlife conservation, travel and culture.

Sahitya Rani is an independent illustrator and visual designer based in Thane. She primarily illustrates children’s and middle grade picture books and comics.
No, this does not refer to a house of sleep-deprived politicians at an all-night parliamentary debate. This is what a group of owls is called.

The English language has some wild and wonderful names to describe groups of animals. We use these words, referred to as collective nouns, when we talk about a herd of cattle or a flock of sheep. In school, we may be given exercises where we have to match or fill in the blanks: a ______ of lions, a ______ of fish, or a ______ of wolves.

These are only a small taste of the descriptive terms used to describe groups of different kinds, the history of which can be traced back to the Middle Ages in England. The earliest known collection of terms of collective nouns, or ‘venery’ (an archaic term for ‘hunting’), is in the Book of Saint Albans, a kind of handbook for hunters first published in 1486.

Included among chapters was a list of the Compaynys of Beestys and Fowlys, where many of these common terms made their first appearances—including pride of lions, flock of sheep, and herd of deer.

I have always been intrigued and fascinated by these collective nouns. I think that a gaggle of geese sounds just so appropriate, as does an army of ants (especially having once been literally attacked and badly bitten by a marching regiment of army ants).

Not to mention the hoppers and slitherers from a colony of frogs, a knot of toads, a quiver of cobras, a bask of crocodiles, and even a culture of bacteria!

While serious scientists may not be amused at the attribution of human traits to describe animals, discovering new terms can be great fun for language lovers.

Even more fun is trying to coin one’s own terms! Here are some that I thought of: a cacophony of koels, a preening of peacocks, a menace of mosquitoes, and a buzzload of bumblebees!

A murder of crows, a convocation of eagles, a deceit of lapwings, a ballet of swans, a siege of cranes, a conspiracy of ravens, a company of parrots, a murmuration of starlings and a flamboyance of flamingos!

And what about our four-legged friends? Here are some quirky ones!

In the biblical story of Noah and the Ark, when Noah invited representatives of all animals onto his ark, he had to select a pair each from: an ambush of tigers, an array of hedgehogs, a bloat of hippos, a crash of rhinos, a rumpus of baboons, a shrewdness of apes, a singular of boar, a skull of foxes, a sleuth of bears and a mob of kangaroos!

Not to mention the hoppers and slitherers from a colony of frogs, a knot of toads, a quiver of cobras, a bask of crocodiles, and even a culture of bacteria!

Why don’t you try your hand at coining some appropriate, and fun, words to describe groups of creatures that hop, skip, jump, fly, creep, crawl and more!

Write to us at editor.ccmagazine@gmail.com and we will try to put it up on our social media channels!

Mamata Pandya has been an environmental educator for over three decades. She is also an instructional design consultant, writer, storyteller, and blogger based in Ahmedabad.

Ambika Karandikar is a children’s book illustrator and a trained Bharatnatyam dancer. She loves to illustrate for children through different mediums.

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Letter from a dandelion

Author Viola Hallé Ruzzier | Illustrator Adrija Ghosh

My dear sister,

How I miss you! That gust of wind came so suddenly I didn’t get a chance to say goodbye properly. Poof! And I was gone, blown away from the fluffy sphere of seeds we were once part of. I know I should be excited, but right now, I’m just homesick.

Home wasn’t always pleasant, it’s true. It was scary when the larvae would land on our leaves, and people would pick up our friends to blow a wish. I wonder why they do that—it’s not like we have any power over their wishes.

But I guess no one told them that. I remember hearing that once upon a time, they used to love us for all the things we helped them with. They ate us, used us for medicine, and then there’s the wish thing I was talking about.

Some people still eat us, but a lot of others don’t seem to like us very much. Not even just for food, but in general, it seems like they’re trying to get rid of us. I wonder why. Not that I particularly like the idea of being picked and eaten. But at least if they ate us, they wouldn’t want to get rid of us, the way so many people want to do now.

Did you know we were brought over to the Americas on purpose? Someone crossed all of the Atlantic Ocean with us, just to make sure we would be there too. And now they spray those awful chemicals all over their lawns, just to make them look greener, without thinking that those same chemicals are bad for everyone else, too. Don’t they know we’re good for the soil? That our roots bring up nutrients from the soil so other plants can use them too?

But I’m sorry for the tangent. You know how I get when I start talking about a subject I care about. Where was I? Oh right, I was being nostalgic.

I’m going to describe what our home looked like; if I write it down, maybe I’ll remember it for longer. It was a nice little patch of grass, somewhere in some city. It’s funny, I never bothered to learn its name. I guess it wasn’t that important. In a garden somewhere, maybe? Or a park? I just remember there being some big trees nearby. I hope they’re doing well.

And the plant we grew up on—aside from you, that’s what I miss the most. The more I think of her, the more nostalgic I become. It’s amazing,
all the things she did. All the roots she grew (and they were long, too), the leaves that formed a little rose at the base of her stems. Because she didn’t just grow one, but two! Imagine the energy that must have taken. Two full flowering stems at the same time. So many of us little florets, forming the two flowers that (I hope) were her pride and joy. And both flowers supported by just a little hollow stem—so easily broken, and yet they stayed strong the whole time. I hope it was worth it. But then (without sounding too self-important), I suppose that without the flowers, she wouldn’t have been able to reproduce. That’s something to think about, I guess, when I’m feeling bad. Even this far away from her, we’re still helping.

When I think of the little florets we once were, yellow and bright and young, tears almost spring to my eyes (or they would, if I had any). We lived so happily, photosynthesizing and chatting away. Remember the butterflies that would come for the nectar? It tickled so much when they took it that we would close up in the afternoon, just in case they came back. But they never did. I think they were on to us.

But time passes, as all things must. I remember being terrified of leaving home. I didn’t want to turn into a seed, I didn’t want to grow the beak and the pappus that allowed us to drift through the sky, I didn’t want to leave all that I had ever known. And I know, we only really lived as florets for a few days. But I don’t remember anything from before that, so those few days were my entire life. I bet you were scared too, no matter how brave you acted. But I really should thank you for that—if you had seemed as scared as me, I don’t know how well I would have handled this transition.

Not that I had much of a choice. The head of the flower, the part that held us all together, really, dried; the yellow petals dried; all that was left was us little achenes, the little fruits that were supposed to carry on our family thanks to the single seed we carried with us. Oh, how I trembled in those days—with every breeze I was convinced I’d be blown away. And then one day I was.

But I have to say, now that it’s happened, I’m quite happy about it. The voyage was exciting! I didn’t know where I was, or where I was going, but it was all new, all things I had never seen before. You know, I knew what spiderwebs were, and I had always admired how pretty they were, dewdrops glinting in the early morning sunlight. But I had never seen them close up, and on my journey I nearly flew into at least three. The spiders weren’t too happy, but I apologised and hopefully they’ll get over it. And there were so many houses, and people, and animals, and rocks and leaves and trees and flowers and so many more things that I’ve since forgotten! And I never would have seen them if it hadn’t been for that particularly strong gust of wind that separated us.

I drifted through the air like this for a long time. I’m not sure if it was hours, or days—after a while you stop keeping track. At least I did—was it the same for you? But eventually I landed on a little patch of grass, somewhere by a fountain. It’s not that different from where we grew up, actually, but it still feels so new. As soon as it rains a little I think I’ll send down a few roots. If I’ll feel more like home, then.

What about you? Where did you end up? Are you still on our mother plant, or have you found your own way? I thought I saw you get blown away at the same time I did, but maybe I was wrong. Write back to me whenever you get a chance; I’ll let all the bees know where I am, so you can ask them for the address. In the meantime, I hope you’re doing well. It’s different now, with everything that’s happened to us, but I don’t think it’s a bad thing.

Yours from away,
Your sister

Viola H. Ruzzier graduated from McGill University with a degree in Anthropology and Biology. She enjoys writing and drawing and is starting a career in science communication.

Adrija Ghosh is a practicing illustrator from Calcutta, residing in Bangalore. She draws for publications, editorials, children’s books and comics. When not drawing, she is obsessing about creating a culinary storm.
Ssscared of sssnakes?

Have you ever seen a snake while you were out walking? Or maybe at the zoo? How did it make you feel? If you were scared, you’re not alone! Many people are convinced that they were born afraid of snakes. However, some scientists don’t believe that is the case—they think that we may learn to fear snakes when we are young partly because we are so good at detecting them. Read on to find out more!

Why might we fear snakes?

Everyone knows what a snake looks like: long, scaly body with no arms or legs, a distinct and sometimes pointy head. Our brains can pick out the long, sleek shape of a snake quicker than it can detect the shape of a mouse or a grasshopper because we know that the snake is a bigger threat. Think about a time where you may have mistaken a rope or stick for a snake and spooked yourself! This happens because we are really good at picking out shapes that could be harmful to us.

Our brains are masters of recognition. We can see shapes in clouds, words in word searches, and even faces in household objects! So it comes as no surprise that we can quickly recognise snakes and their movement. Long ago, our ancestors had to live beside snakes every day. Snakes can be dangerous if they are frightened, and venomous snakes posed a big problem for the first humans. The brain figured out a way to keep us safe from snakes by learning how to recognise their shape and the way they move, faster than we identify other animals and movements. This quick perception made us more prepared to learn to fear snakes.

But are humans scared of snakes from the time we are born? It turns out that babies are not scared of snakes, but they are very good at identifying them quickly and focusing on them. Researchers showed babies under six months old pictures of different animals and plants and noted their reactions. Though the babies showed increased focus and heightened awareness when viewing the snake picture, they did not seem afraid of the photo until they were shown a picture of a scared adult face next to it. This could mean that the babies only acted afraid of the snake when they saw another person who was scared. We can learn to be afraid of things like snakes and spiders by watching how other people react to them, or by having a negative experience with these animals.

Should you be afraid of snakes?

Since it was most important for our ancestors to avoid venomous snakes (those that deliver a harmful substance through their bite or sting—as opposed to poisonous animals, which are those that make others sick when eaten or touched) that could make them very sick, we might jump to the conclusion that any snake we see is venomous, and therefore
dangerous. Venomous snakes can be found all over the world. Snakes with venom use it to immobilise their prey—or make it still enough to eat. Venomous snakes can use their venom to protect themselves, too. Many times, when a venomous snake bites a human, it is because
the snake was startled or was being handled by the human. Luckily for us, snakes do not usually bite unless they are threatened and have to protect themselves. Most scaly serpents prefer to slither away when something bigger than themselves comes near. This means that most of the time snakes aren’t going to chase you or even come near you. We’re also much larger than snakes’ normal prey, and they know that, too. So have no fear—there’s no way a snake will mistake you for a meal (unless maybe you smell like a mouse).

Even if you aren’t afraid of snakes, you may find them creepy! You are not alone in feeling this way. Maybe you think snakes are slimy. Or maybe the way they move and their lack of legs weird you out. We tend to not like animals that look very different from us compared to animals that are more familiar. Animals with four legs and fur are easier for us to relate to and form bonds with; snakes are neither furry nor four-legged, so we might find them too bizarre to like.

However, snakes may be more like humans than you think! Snake ancestors long ago once had legs, and some snakes have little pieces of those old legs hidden in their bodies. Snake scales are even made of the same material that our nails are made of: keratin. Though they are scaly, snakes are neither slimy nor wet! Their shiny scales give the appearance of sliminess, but they are actually dry and smooth. If you want to know what a snake feels like, rub your fingernail!

Why should we like snakes?

Sometimes people want to harm things that they find gross or scary. Snakes are often harmed by fearful people for this same reason. It is important to respect snakes and protect them, though. Snakes are a crucial part of many ecosystems because not only do they eat other, smaller animals, but they are food to bigger animals as well. We can even benefit from snakes. Pesky mice and insects that creep into our homes can be kept at bay by a hungry snake in your backyard. Snakes are more helpful than harmful!

So, are you born with a fear of snakes?

Probably not, but that doesn’t mean that we aren’t born with a readiness to be afraid of things that can hurt us. We know that our brains evolved to distinguish a snake in the grass more quickly than other creatures, and that happened because venomous snakes can be dangerous to humans when provoked or startled. We may learn through TV shows and books that snakes are scary, but we aren’t born being afraid of them. We are born with an excellent ability to recognise the potential danger snakes pose. So thank your brain for its excellent recognition skills and admire our legless friends from a distance!

Morgan Lyons is a program manager at a natural history museum. She completed this article as part of her graduate work with Project Dragonfly at Miami University in Oxford, Ohio.

Navya Raju is an illustrator and designer with an academic background in architecture. She enjoys illustrating and writing children’s books. When she’s not drawing or daydreaming you can find her with her nose in a book or trying out a new hobby.
Have you ever climbed a tree?

I love trees. I love eating their fruits and smelling their flowers. And most of all, I love climbing them. I want to climb every different kind of tree in the world.

I want to climb a jackfruit tree. It has a thick trunk for a good footing, and strong, sturdy branches to hold my weight. But I will need to watch out for falling fruit!

Author Priyadarshini Gogoi
Illustrator Barkha Lohia
I want to climb a chinor tree.
In autumn, it glows with bright, red leaves, and becomes the best hiding place.
But, in the winter, there are no leaves left to hide in.

I want to climb a betelnut tree.
Climbing would be easier if there were branches on the trunk.
But I will take it as a challenge and hop, hop, hop to the top!

I want to climb a moringa tree.
It looks easy to climb, at least to me.
But the trunk is so thin that the higher I climb, the more it will bend downwards.

But to climb a mangrove tree, I will have to splash through muddy, crocodile-filled water first.

I want to climb a mangrove tree, with its spindly branches and giant, exposed roots.
I want to climb a khejri tree. It would be tricky to climb the many thin, thorny branches.

But I will twist and dodge and avoid getting pricked.

Priyadarshini Gogoi is a picture book author and poet from Assam. When she’s not writing, she loves to sing, paint, and do crafts. Several children have told her that she is cool.

Barkha Lohia loves working on picture books, editorials and sometimes dabble in tattoo art. Apart from these, she can often be found loitering around jungle spaces of Delhi. Clicking, collecting and sketching away.

Have You Ever Climbed a Tree? (English) was written by Priyadarshini Gogoi and illustrated by Barkha Lohia, supported by Sofina Covid Solidarity Fund, published by Pratham Books (©Pratham Books, 2021) under a CC BY 4.0 licence, first released on StoryWeaver.

You can read the original story here.

Coral Reefs

Author Neha Kandalgaokar
Illustrator Siddhi Vartak

Welcome to my world!

As clichéd as that may sound, I mean it. I literally build a world for myself and for all the living things around me. Who am I, you ask? Let’s dive in to find out.

What comes to your mind when I say ocean? The large expanse of blue water, the schools of colourful fish swimming underwater, whales and sharks and octopuses, or the deep, dark waters? Or all of it?

Well, we know that fish and all kinds of marine animals live in the oceans of the world. But have you ever thought about whether the fish live in houses underwater? What if I told you that some of them did? And what if I told you I am their house!

I am responsible for the underwater housing colonies. I am a coral reef. And even though we cover less than one percent of the ocean floor, around 25 percent of all marine animals depend on us. That is why we are also called the 'rainforests of the sea'.
When you first see me, you might think I’m an underwater plant. I do look like a plant, don’t I? The truth though is that I am not even related to plants. I am an animal! Can you guess which organisms I am more closely related to? The answer is sea anemones and jellyfish.

When I started off, I was tiny. My baby name was planula. I was born along with thousands of other tiny siblings. We swam through the ocean until we found solid ground—a rock on the seafloor. We can be quite picky about where we choose to settle down, because once we settle down, we never move. We need a good amount of sunlight reaching us and just the right kind of ocean currents.

Once settled, I turned from a planula to a polyp. And I am quite a good-looking polyp, if I may say so myself. I have a cylindrical, hollow body. Yes, you heard that right. I have a hollow body. Unlike the skeleton that’s inside your body, mine is outside my body! That’s why it’s called an exoskeleton. It’s like a protective shield for my body. It’s made of calcium carbonate—the same material as chalk, which your teachers use to write on the blackboard. I am known as a hard coral because of my exoskeleton, but you can also find soft corals in the ocean.

My mouth, located at the top of the hollow body, is surrounded by tentacles. And my tentacles have stinging cells! They help me capture food that is swimming or floating around me in the surrounding waters. That’s mostly for dinner. During the day, I have special friends who make food for me. That’s right, I have awesome friends! And not only do they make food for me, they also make me look pretty. Confused? Let me explain.

My family and I are known for our colourful appearance but we are, in fact, translucent! So where do we get our vibrant colours from? The same friends who make our food also give us our colour. We have tiny microscopic organisms living inside us called zooxanthellae. These single-celled organisms are what give us our colour. Just like plants, they use sunlight to make their food. They share this food with us, and we, in return, give the zooxanthellae space to stay. This kind of friendship is called a symbiotic relationship, where we both help each other.

I also have an extraordinary ability to multiply. Like a tree that has branches, I branch out forming a coral colony. Do you know where the largest coral reef on Earth is? It’s in Australia and is known as the Great Barrier Reef.

Coral colonies are found in many different shapes. Some of us look like a brain and are called brain corals. Staghorn corals look like the horns of a stag and sea fan corals are flat fan-like structures.

All kinds of marine life forms live in our colonies. We provide shelter and secret spaces to hide from predators as well as nurseries to rear young ones. Our colonies also offer a large variety of food for the larger fishes and marine animals. From the tiny pygmy seahorse, mantis shrimp, and Christmas tree worm to the parrotfish, octopus, turtle, and reef shark, the coral reefs are used and visited by a wide variety of animals.
But that’s not all. We protect the coastlines from storms and erosion caused by waves. We provide livelihoods and are a source of food for local communities. And on top of all that, we offer excellent recreation opportunities, like scuba diving and snorkelling, for tourists who come to visit us from all over the world. We love welcoming you and showing you around our colonies, but we ask that you do so responsibly and be gentle with us as you swim and walk around us.

Unfortunately, despite being so awesome, we are under serious threat today. We are very sensitive to changes in the ocean that are a result of irresponsible human actions. A rise in the number of natural disasters, such as hurricanes and cyclones, the warming of oceans due to climate change, and water pollution, are some of the reasons why corals are dying everywhere.

When the water temperature rises, the zooxanthellae living inside us leave. As a result, we not only lose our colour and become white, we also lose our food-making friends.

Now that you know about our extraordinary lives, you can help us by telling your friends and family about us and our plight. Learn and understand more about the human actions on land that affect us in the oceans. Be a part of Team Coral and help us stay alive and vibrant so we can continue to house the fish and other underwater creatures, provide food for everyone, and take you on spectacular adventures of the underwater world.

Neha Kandalgaokar co-runs a social enterprise journeys with Meaning. She finds joy in writing, facilitating, curating and creating meaningful content and experiences for children.

Siddhi Vartak is a storyteller. She holds a bachelor’s degree in Animation Film Design from NID, Ahmedabad. She writes, paints, illustrates, and animates to explore her artistic voice.

My name is Eben and I am 8. I love nature but fungi is my favourite thing! Fungi is so fascinating because there are so many different types to spot, there are more than 15,000 types in this country! They are so different too, they are different sizes, shapes, colours, and smells! People don’t normally notice them, which is sad!

If you look closely, they are everywhere and so interesting. I saw 54 species in one trip to my local woods. I have recently seen a Lions Mane fungus it is also called Bearded Tooth, it is extremely rare on the and protected by law because it is so special. It is illegal to pick or damage this fungus. It is special for making medicines for memory problems. It is so beautiful, it looks like a beard on a tree. It grows on very old beech
trees. It is endangered because too many people have picked it and we have to look after them. Fungus is so important because lots have medical properties, they are important recyclers and help decay leaves and other plants which is essential to the environment. If there weren’t mushrooms, we would be swimming in leaves!

I also recently saw an Octopus Stinkhorn or Devils fingers fungi it is outrageously stinky! It erupts from an egg like a normal stinkhorn. It looks like a pink squid! Its tendrils are spirally. This is a rare fungus, but I saw 11 in one go! It has been in the UK for about 100 years and is meant to be from the Southern Hemisphere.

I have written a book about Fungi, and it says the ones I have found near my town in Devon. I wrote it because the world is changing and to support Devon Wildlife Trust, it has raised more than £1150. I am writing another book about Fungi and also other plants and animals to spot. I hope more people will notice fungi and other animals and see how special nature is and help protect it too.

Eben Grant is an 8-year-old nature enthusiast and amateur mycologist from Devon, UK.

Interested in conservation, environment, and climate?

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