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## Nature's Gold

Issue 04 - Autumn 2020

The Nature's Gold contributor community is a mixture of environmental degree graduates, parents, volunteers, business owners, retirees with one eco-driven purpose: how we can create a more sustainable planet for the future of all species that depend on our actions today.

Our aim is to inspire, inform and collaborate – there is a lot of doom and gloom news about the natural world, so we hope to also show you the positive changes that are already in motion, and that there can be hope, especially if we work together.

We put forward scientific thinking that is accessible to all and report on the latest conservation news and politics. We introduce eco-friendly ideas and highlight fascinating and uplifting environmental and conservation projects around the world. We love to promote nature photographers and videographers – images can speak volumes!

We believe that knowledge of the natural world and how best to protect it from further harm, should not solely lie with scientists but with everyone. We all have our part to play, and our planet depends on us. Change is always inevitable, but there's no reason why we can't make it a positive one!

Our new website is now live:  
[www.naturesgoldmagazine.com](http://www.naturesgoldmagazine.com)

## Say hello to our contributors

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# Welcome to Nature's Gold

2020 has definitely thrown a curve ball for us all. It has been a year of heartbreaking losses and historic events with the pandemic, Black Lives Matter, extreme climate incidences such as the terrible wildfires in America, not to mention the heightened political furore around the world. As a result, our well-being and mental health have been thoroughly tested.

Importantly however, we have been learning, growing, and adapting not unlike the evolution of nature itself. We have more things in common with nature than we realise, we are after all an integral part of the ecosystems that keep us alive. And nature is continually in flux. As I write, my favourite season of Autumn is finally creeping in. Its presence can be felt through the perceptible golden hues appearing on the trees and the smell of wood smoke hovering on the breeze.

Whilst our planet may have had the briefest of respites during worldwide lockdowns, the easing of them has started to indicate even worse effects on our climate and pollution problems. I recently went for a hike in the beautiful Peak District National Park. It was heartbreaking to see amongst the greenery, the careless discarding of disposable blue masks. A new addition to the usual plastic bottles and general litter that sadly already plight our countryside.



As a community however, we must carry on with the good work already in motion. We must try to continue to learn from each other and work together towards the one goal of making this planet a better place for all.

Our contributors have some amazing articles for you to read to inspire you and give hope and help you take a well deserved break from the madness of this year. Thank you to you all for being here – whether you are reading our articles, have written the articles, submitted your beautiful photos or allowed us to feature you in this magazine – we are so grateful for this community!

As ever, if you would like to contribute in our Winter issue send us an email at [naturesgoldmagazine@gmail.com](mailto:naturesgoldmagazine@gmail.com) - we are always looking for new contributors, photographers and environmental projects to feature and would love to have you on the team.

Thank you everyone, stay safe!

**Emma Kajiyama**

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2020

# Nature's Gold

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2020 News

by Richard Jones

## Lockdown Sees Temporary Air Quality Increase

While Covid-19 shut down the human world, the natural world was given a chance to breathe a sigh of relief.

Across the world, a wave of reports that lockdowns reduced pollution and increased air quality have been seen. In China, between February and March a 25% decrease in carbon emissions compared to the same period last year was recorded, while the number of “good quality air days” increased by 21.5%.

In Italy, similar air quality increases were observed, as well as waterway improvements. The water in Venice's canals has been observed as being the clearest ever in the memories of many residents, with some even saying they have been able to spot fish in the water for the first time.

Domestic air travel plummeted in the spring and summer months, with an estimated 67 million fewer air passengers in Europe alone.

In the first two weeks of lockdown in the UK, nitrogen dioxide levels fell by up to 60% compared to the same period of the previous year, as the country saw a major cutback on car journeys. Speaking in April, Friends of the Earth clean air campaigner Jenny Bates said: "Seeing this drop in air pollution shows that less traffic can quickly lead to cleaner air. "Once this dreadful situation is over, we don't want to

rush to go back to where we were or worse, and we can't have an accelerated return to business as usual. We can have a better, cleaner future for ourselves and the planet."



## Environment Agency Head Supports Scrapping EU Water Framework Directive

The Head of the Environment Agency has voiced his support of a proposal that would see English water pollution laws weakened after the UK leaves the EU. Addressing an audience of business leaders, Sir James Bevan announced his support for amending England's adherence to the EU's Water Framework Directive (WFD). Currently, only 14% of English rivers are classified as “good” under the directive, leading campaigners to believe the Environment Agency are trying to find a way to upgrade the status of its waterways without actually changing their condition.

Bevan however, argued in his speech that the WFD's four assessment criteria are too strict, and said that a reformed framework in England would not downgrade the status of a waterway for failing on only one criterion. He went on to criticise the “one-out-all-out” rule, saying it “can underplay where rivers are in a good state, or where improvements have been made, to those that aren't. Right now only 14% of rivers in England qualify for good status under the WFD, because most of them fail on one or other of the criteria. But many of those rivers are actually in a much better state than that, because most of them now meet most of the criteria: across England, 79% of the individual WFD indicators are at good status.”

Bevan's speech sparked an angry reaction from water quality campaigners. Hugo Tagholm, who is involved with Surfers Against Sewage, spoke out against the proposal, saying: “Engineering the testing programme to give the illusion that our rivers are in a healthier state than they currently are won't help us accelerate the much needed restoration of our aquatic and coastal environments.

“Sewage, farming effluent and urban runoff plague and destroy riverine ecosystems nationwide and we need radical thinking and interventions to practically restore and rewild this blue ecosystem for wildlife and for people.”

While the Environment Agency is only responsible for policy in England, it is unclear as to whether the environmental agencies for the devolved UK nations support the Environment Agency's proposals regarding the WFD.

## Grounded Tanker Spills A Thousand Tonnes Of Oil Into Mauritian Waters

The Japanese owned ship, MV Wakashio, hit a coral reef on the 25th of July before breaking apart and releasing over 1,000 tonnes of oil into the coastal waters.

After the grounding, efforts had been undertaken to pump out all 4,000 tonnes of fuel oil the tanker was carrying. Nearly a month later, the ship broke in half, causing all fuel left on board, believed to be around a quarter of the original load, to be released into the sea.

While the volume of oil spilled is relatively low compared to other high-profile oil spills in recent years, it is the location of the ship near to two environmentally protected areas which is especially worrying. The tanker ran aground at Pointe D'Esny, off the East coast of Mauritius, with satellite images showing the oil reaching almost to the Island of Ile-aux-Aigrettes, home of endangered wildlife and plants. Marine biologist Dr Corina Ciocan, who is a senior lecturer at the University of Brighton said: "There are very few such marine areas with such rich biodiversity left on the planet. An oil spill like this will impact almost everything there".

The incident has been declared a national emergency by the Mauritian government, but in late August the biggest demonstration on the island in years began, where 150,000 people started a protest against the government, who they felt could have done more to prevent and treat the oil spill.



## Atlantic Ocean Plastic Pollution Worse Than Feared

Over ten times the expected amount of common microplastic particles have been found in the Atlantic Ocean, suggesting plastic pollution may be worse than feared.

A study carried out by the UK's National Oceanography Centre took new measurements from the surface of the ocean down to 200 metres deep, discovering between 12 and 21 million tonnes of the most common oceanic microscopic plastic particles. Extrapolating this data for the whole Atlantic, the researchers calculated a total concentration of these plastics at about 200 million tonnes.

Previous estimates, which were calculated based on municipal waste outputs into the ocean, had been substantially lower, with 17 to 47 million tonnes calculated to have been released into the ocean between 1950 to 2015.

Lead researcher Katsiaryna Pabortsava expressed concern over her findings, saying: "There is an awful lot of very, very small microplastic particles in the upper Atlantic Ocean, much higher than the previous estimate. The amount of plastic has been massively underestimated. We need to answer fundamental questions about the effects of this plastic, and if it harms ocean health. The effects might be serious, but might take a while to kick in at sub-lethal levels"

It's not all doom and gloom...

## Wild Bison To Return UK After 6,000 Year Absence



Kent Wildlife Trust and the Wildwood Trust have announced plans to release a small herd of wild bison as part of their Wilder Blean project.

Bison are thought to have been a common sight in Britain up until 6000 years ago, and the two contributing parties, who have received financial support from the People's Postcode Lottery, are hoping that the reintroduction of the species will draw in visitors as well as enriching the local environment.

Initially a small herd of one male and three females will be released into a managed area of 150 hectares, with plans for expanding the herd through natural breeding. The initial introduction is planned for Spring of 2022, and eventually it is hoped that the herd will roam an area of up to 500 hectares. Bison will be taken from either Poland or the Netherlands, where a reintroduction scheme has already been successfully undertaken.

Not only is it hoped that the project will help with the protection of Bison, which are an endangered species, but also that the herd will help to regenerate the area, which is the site of a former pine tree plantation. The bison are expected to kill off some of the trees, which will lead to a more balanced habitat of trees, shrubs, and glades, creating a more supportive environment for birds and insects.

Paul Hadaway, who is involved with the project through his role at Kent Wildlife Trust said: "The Wilder Blean project will prove that a wilder, nature-based solution is the right one to tackle the climate and nature crisis we now face. Using missing keystone species like bison to restore natural processes to habitats is the key to creating bio-abundance in our landscape."

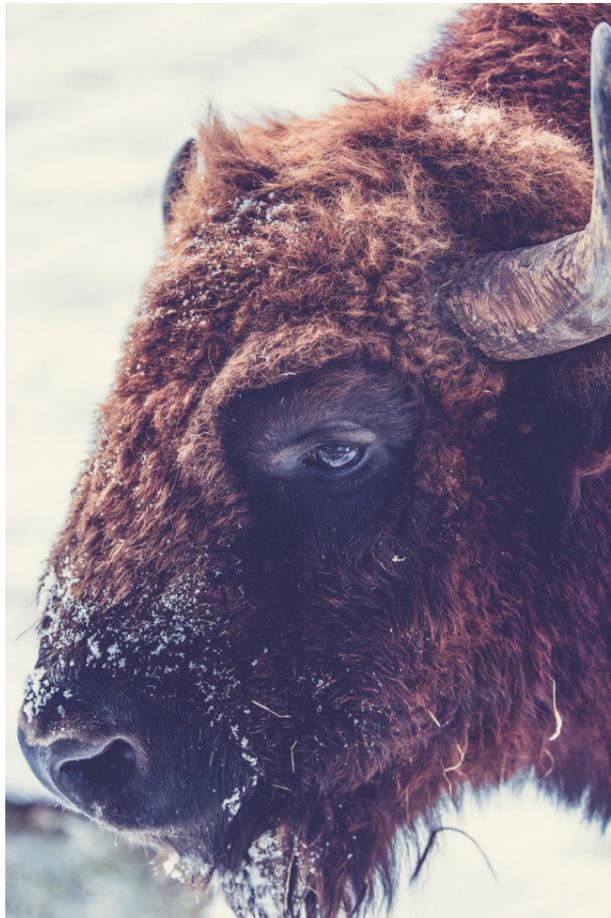


Photo courtesy of PJC&Co / CC BY-SA (<https://creativecommons.org/licenses/by-sa/3.0>)

## Resurgence Of Rare Large Blue Butterflies In Gloucestershire

Britain's largest butterfly has been logged at Rodborough Common for the first time in 150 years. Declared extinct in Britain in 1979, lepidopterologists began the task of reintroducing the Large Blue a few years later. Almost forty years after, the South of England has several sites with sustained populations, and ecologists in Gloucestershire are now rejoicing after seeing the species successfully reintroduced to the common.

The Large Blue's return to the area is the culmination of five years of work from the National Trust, Butterfly Conservation, the Limestone's Living Legacies Back from the Brink project, Natural England, Royal Entomological Society (RES) and the Minchinhampton and Rodborough Committees of Commoners. Preparations for a successful reintroduction included the transformation of local cattle's grazing patterns, provision of marjoram and

thyme as sites for egg laying, and plenty of red ants for the butterflies to feed on.

The cattle population is important in this scheme, says research ecologist David Simcox. The cows are helpful in "keeping the grass down so sunlight can reach the soil which gently warms it creating perfect conditions for the ants". Simcox, who is also a co-author of the commons management plan continued to say "Then, in the summer when the ants are out foraging, nature performs a very neat trick – the ants are deceived into thinking that the parasitic larva of the large blue is one of their own and carry it to their nest. It's at this point that the caterpillar turns from herbivore to carnivore, feeding on ant grubs throughout the autumn and spring until it is ready to pupate and emerge the following summer."

Since the release of over 1000 larvae on the site last year, 750 adults have been recorded in the area this summer.



# Interview with Dave Goulson

by Emma Kajiyama

Photos courtesy of Dave Goulson

Nature's Gold talks to Dave Goulson, bestselling author of 'A Sting in The Tale', 'A Buzz in the Meadow' and 'Bee Quest' among other publications.

# Dave Goulson

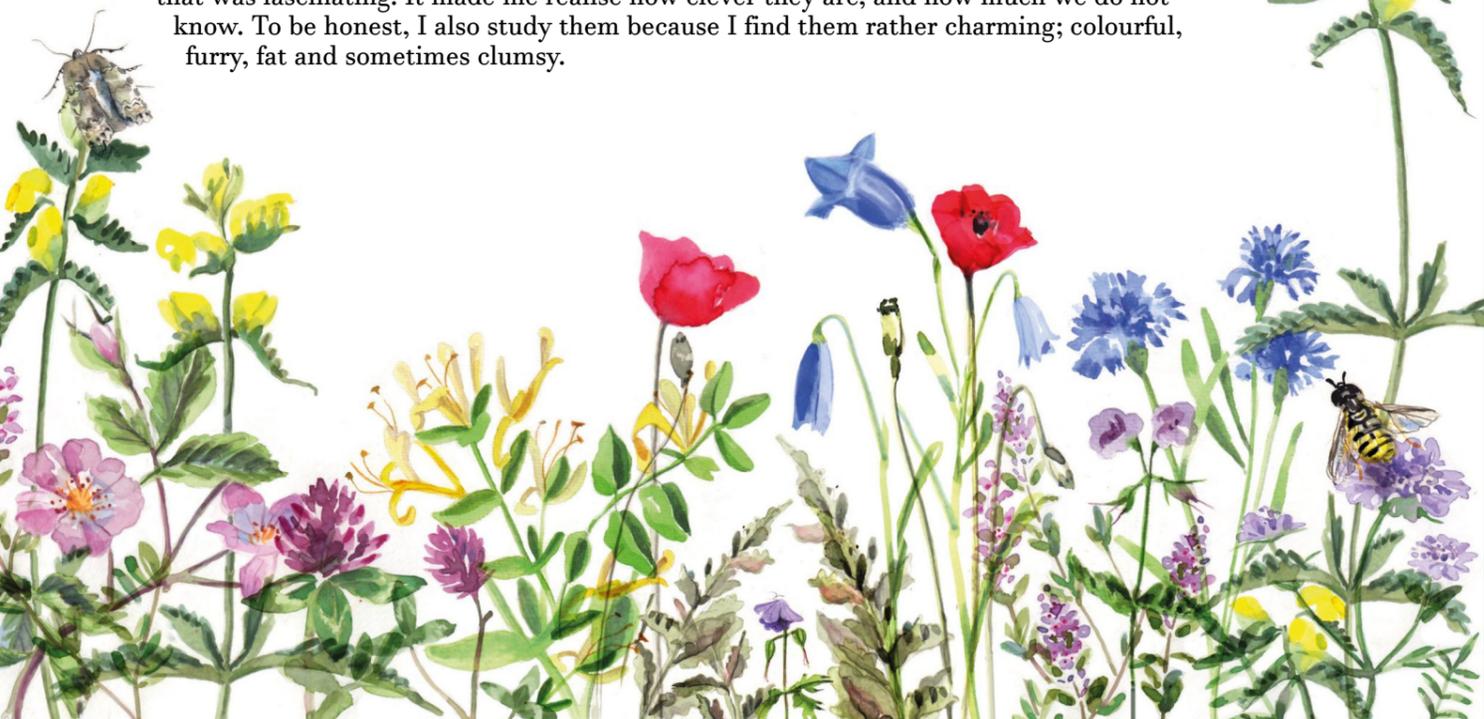
[Dave Goulson](#) is a Professor of Biology at the University of Sussex and founder of the [Bumblebee Conservation Trust](#). He has written numerous peer-reviewed scientific articles on insect and specifically, bee ecology. He is also the bestselling author of several books such as 'A Sting in The Tale', 'A Buzz in the Meadow', 'Bee Quest' and most recently, released in 2019, 'The Garden Jungle: Or Gardening to Save the Planet'. The latter is a fascinating account of the abundance of wildlife present in our back gardens, in particular, championing the roles of the under-appreciated insects who play a vital role in keeping our ecosystems in balance. The book emphasizes the importance and duty of us all to help nurture a healthy environment through wildlife-friendly gardens.

**Hi Dave, thank you so much for taking the time to talk to us! When did you first become fascinated by the natural world?**

From as early as I can remember I was fascinated by insects in particular. When I was about 5 or 6 years old I collected yellow-and-black caterpillars from some plants growing in my school yard, and reared them at home in a jam jar. They turned into beautiful red and black cinnabar moths, and I was hooked! I think that most people go through a 'bug phase' when they are young, but sadly most of us grow out of this.

**What made you become interested in studying bumblebees, in particular over other pollinators?**

Many years ago I spotted an unusual behaviour in bumblebees – they often fly up to flowers and veer away at the last minute, as if there is something wrong with it. I started trying to work out why – it took 5 years – and it turns out that they sniff flowers for the faint smelly footprint of a recent bee visitor. Flowers that smell of bees are likely to be empty. I thought that was fascinating. It made me realise how clever they are, and how much we do not know. To be honest, I also study them because I find them rather charming; colourful, furry, fat and sometimes clumsy.



**As an advocate for insects, could you explain why you believe that they are so important for biodiversity and what threats are they currently facing?**

This is complicated – for a full answer, you should read my book, “The Garden Jungle”! In short, insects make up the bulk of biodiversity, are food for numerous organisms, and are intimately involved in almost every ecological process on land or in freshwater. Without them, the rest of life on Earth would collapse. Sadly, they face threats from habitat loss, pesticides, climate change, invasive species, light pollution and more. We are making the world hostile to insects, and thus to life, and that is very foolish.

**Many of us are aware that paving and artificial grass provides no benefits for our pollinators. What can we do to boost the success and health of our pollinators when it comes to our own gardens?**

It is very easy to make your own pollinator paradise. Plant pollinator-friendly flowers, both native and ornamental (some of my favourites are listed in the book I mentioned). Do NOT use any pesticides – why would you spray poison in your garden!? Put up a bee hotel. Mow your lawn less, ideally leaving some for just an annual cut, so creating your own mini hay meadow. Add a small pond for aquatic insects too. Your garden will soon be bursting with buzzing, flapping, hovering, hopping, crawling insects

**Do you have any new projects or books on the pipeline that we can look forward to?**

I have two new books to be published in 2021. Silent Earth is about insect declines and how we can stop them. Gardening for Bumblebees is a practical, colour guide to making your garden insect-friendly.





# Lockdown Gardens UK

Words and photos by Max Holland

Texting my friends during this lockdown period I noticed many of them were sending pictures of their gardens. Inevitably with so much more time to kill they had a chance to spend planting and caring for their little plots. Talking to them about their experiences and accomplishments, I was struck by how their attitudes to their gardens had changed through the nurturing, enjoying and finally reaping rewards for their efforts with lovely flowers or home-grown vegetables. I asked 5 simple questions:

1. How involved were you with your garden before lockdown?
2. What have you done during this time in the garden that is new for you?
3. What have you learned?
4. Any handy hints that helped you?
5. Any special pleasures?



### Ruth

1. I garden because I love Cosmos so I have to grow them every year! Gardening has always been trial and error with me. During the hot spell in April and May I was in the garden most of the time. I find it a healing place and my health seems better with my feet in contact with the earth.
2. This year I dug up a patch of ground in a shady spot and planted a random packet of wild-flower seeds. It is a pity that so many of the apples on my tree just go to waste. There used to be an organisation which picked fruit and distributed it to the homeless. Not any more though sadly.
3. Perhaps the very hot weather followed by a lot of rain affected the plants as this year my French beans have not done as well. There has been a problem with slugs eating the tops of the growing veg thus killing them. I tried putting some of my hair around the runner beans and it seemed to keep them away.
4. Handy Tip! Homemade apple picker! Attach VERY SECURELY a large plastic bottle with a round hole cut into the side, onto an old broom handle or similar. There is quite a knack but it can work!!! Good luck and happy gardening.



### Joanie

1. Not too much, I never had the time. I never bothered with growing flowers or vegetables. My youngest son used the garden as a football pitch for a long time.
2. I've grown beans, courgettes and carrots and had mixed results but it has really changed my relationship with my garden.
3. It has helped me with time. Whenever I have not felt particularly enthusiastic about working in the garden but done it anyway, I have always become engrossed in the process. I've had a heightened feeling of reward and have become interested in noting how well or not, the plants have been growing in certain places in the garden. Watching and caring for the flowers has been interesting and rewarding.
4. Tips: the more you put in the more you get out.
5. It has been wonderful to see newts in the pond for the first time!



### Helena

1. I have always been interested in gardening and have grown vegetables in the past.
2. I took the opportunity of more time to try more different things. I've grown lots of veg from seed. The kitchen became the greenhouse. In early March I had 60 pots of courgettes, cabbages, kale and sprouts in the front garden! I have grown butternut squash, spinach which bolted and various flowers with mixed results.
3. I became very interested in the process and got into the holistic side of trying to understand the inter-relatedness of the varying factors e.g. heat dampness or dryness, aspect of the sun, shade, space, insects, caterpillars, slugs, mildew and many other things.
4. It became a science project as I read more, such as understanding about male and female flowers.
5. Special pleasures include inspiration and excitement in learning and gaining new knowledge. The growing process kept me motivated and I found this very therapeutic. Also, I was able to give some of what I had grown away to friends.



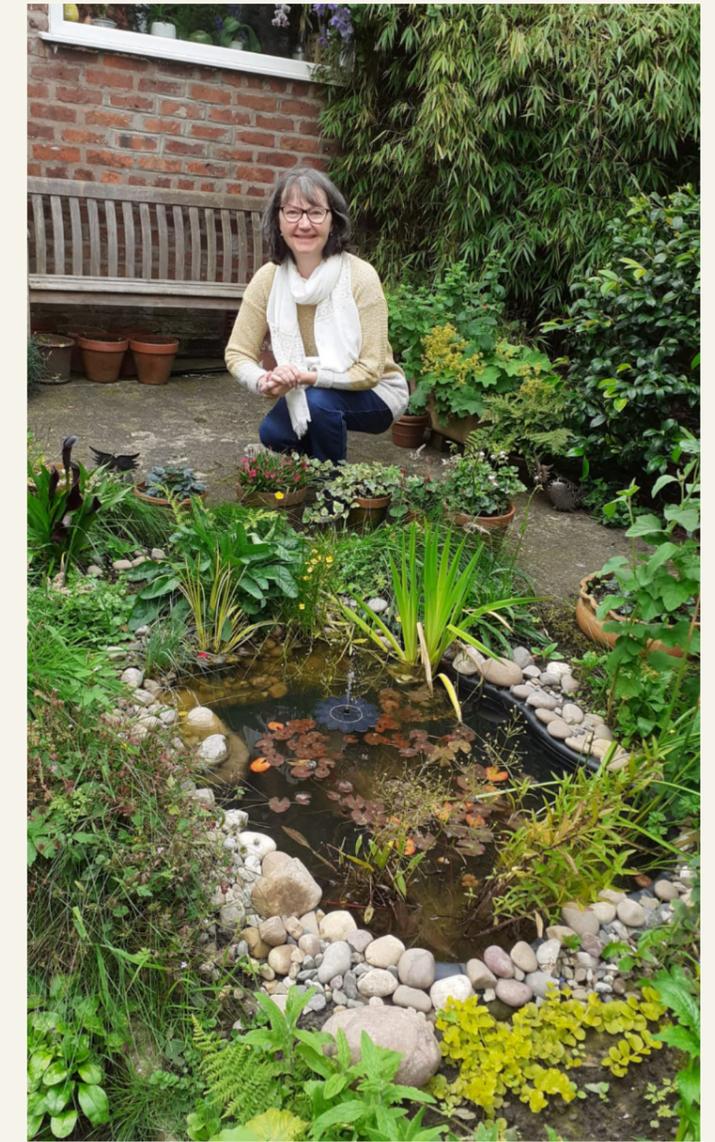
## Jenny

1. My yard is quite small with not a lot of planting space. I did nothing in the garden until I was retired.
2. Lockdown has offered time to create a charming delightful outside space. I envisioned home grown produce supplementing our normal shop, especially due to possible shortages of certain food items. I bought a little greenhouse and planted flowers and vegetables from seed. I have grown lettuce, chard, beans, and tomatoes. A random packet of seeds has produced lobelia, alyssum and calendula.
3. The internet has really helped me with any questions I've had.
4. Starting a compost bin has been really helpful so as not to waste food and helps to enrich the soil too!
5. I've found growing and re-thinking my garden a really satisfying and rewarding endeavour and has kept my spirits high during lockdown.



## Ikuo

1. I have always enjoyed caring for plants and love flowers and I have been rewarded very well for my efforts this year. The garden does not have a lot of planting space so there are many plants in pots.
2. During this lockdown time I have become more involved with the garden, particularly in planting seeds. I planted some salad leaves and rocket and we have had eaten them in a few salads. I have also taken cuttings from our house plants and given them away to friends. This has been a great joy for me!
3. The greatest novelty has been growing Avocado seeds and an apple pip I found which had germinated within the apple. I planted both and they are becoming handsome plants, but I am not sure about where to plant an apple tree!!!!
4. Have a lot of patience and trust!
5. I have planted Morning Glory seeds in two large pots and constructed a framework of string for them to climb up. I am awaiting those beautiful blue flowers soon!



## Jane

1. I have always enjoyed the garden. The nice weather in April/May of lockdown however, spurred us on with our project.
2. Quite ambitiously, we decided to remove the grass patch and sow wildflowers and try to make a pond.
3. I did research into ponds and aquatic plant online. We decided on a solid liner as opposed to a flexible one. The liner was 2.5 feet deep and had a step, therefore we had to dig the hole same shape which was a bit difficult. Shopping for plants was fun and planting was a new experience. I have noticed semaphore flies and mosquito lare I think. We also bought a small solar powered floating fountain to complete our enjoyment.
4. I am very proud of our achievement. It took us many weeks to complete but my advice is to Have a Go!
5. We feel immense satisfaction in our achievement. It has transformed our garden in such a positive way.



# Gardening for Pollinators

Whatever the size of your garden it is possible to create a thriving habitat for all kinds of pollinating insects and fortunately requires little effort.

Words and photos by Emily Pitcher

‘Approximately a third of all the crops humans eat are pollinated by insects, and not just bees. There are thousands of other pollinators out there that we rely on, including butterflies, moths, flies and beetles’.

During lockdown I often turned to gardening for distraction and for a way to stop my toddler climbing the walls after being stuck inside all day. And judging by the scarcity of compost this spring I know I’m not the only one. After being inspired by BBC Springwatch and The Wildlife Trust’s 30 days wild I set out to make our garden a haven for pollinating insects.

You may wonder why I’d want to focus on insects when so many people spend time and money trying to keep insects out of their garden. They do have a bit of an image problem; they eat our flowers and left unchecked, can undo months of hard work in vegetable patches. But insects are important! And pollinators may be the most important of them all. Approximately a third of all the crops humans eat are pollinated by insects, and not just bees. Bees get a lot of publicity, and rightly so, but there are thousands of other pollinators out there too that we rely on for the food we love. These include, but are not limited to, butterflies, moths, flies and beetles. There are 6000 species of hoverflies alone which pollinate a variety of fruit crops. Without wasps, unpopular as they are, there would be no figs. Most importantly, in my opinion anyway, are midges, without whom there would be no chocolate. There are only a few species of midge capable of pollinating the tiny flowers of the cocoa tree. Even if it were possible to survive without insects, we would lose a lot of our favourite foods.

They are also at the bottom of the food chain meaning that many larger species of animal rely on them for food. If you’re setting out to create a wildlife garden, insects might not be number one on your list of desired species but if you can attract insects then larger animals will follow. Birds, hedgehogs and bats all need insects to survive. Without insects entire eco systems would collapse. This is worrying because globally pollinating insects are in decline. Over the past 26 years there has been a 25% drop in flying insect numbers. Bees, the most vital of crop pollinators, have been struggling for decades due to widespread pesticide use and loss of wildflower habitats. In Britain there is now 97% less meadowland than there was in the 1930s. A third of British bees and hoverflies are now in decline, and if this continues then some species will be lost altogether. The good news is that it is not too late. Insects reproduce quickly so if action is taken now they can quickly bounce back. And fortunately gardening for insects requires very little effort. Insects thrive in the neglected parts of the garden. Overgrown patches of weeds can provide food and breeding grounds. Cracks in a wall or holes in a fence can be shelter for a solitary bee. One of the best things you can do to help pollinating insects is to stop cutting the lawn, or at least cut it less often. Common grass flowers such as daisies and dandelions are an easy source of nectar throughout the summer months. Piles of sticks or cuttings make excellent shelters for any number of creatures and log piles can even be used as homes for bumblebee colonies. After cutting the hedge a few weeks ago I lazily left the trimmings in a pile on the path for a few days, when I went to move them, I found woodlice, beetles and centipedes had all made themselves at home already. It just goes to show, if you create the habitats animals will come to them, and quickly.





The most important aspect of any pollinator friendly garden is, of course, flowers. You will need plenty of flowers that are rich in pollen and nectar. There are hundreds of lists of bee-friendly flowers on the internet so I won't list them all here, but you could start by researching what flowers are native to your local area. This will help native species to survive and they should be easy to grow as they are already suited to the climate. It's also important to plant flowers that bloom at different times of year so there is a plentiful supply of nectar and pollen all year round. I have opted for poppies, lavender and rosemary for the summer and have already spotted at least seven species of bumblebees, hoverflies and my first ever ruby-tailed wasp. Even if you don't have much space a few pots of flowers on a doorstep or a balcony can make all the difference to urban bees. If you're buying plants from garden centres or nurseries, ask to make sure the plants have not been treated with any pesticides as they are extremely damaging to pollinators and the environment. Another option is to grow flowers from seed; there are numerous packs of bee-friendly seeds and seed bombs on the market and it can be fun waiting to see what will grow. Admittedly my last seed bomb did look like a big box of weeds for the longest time but eventually my patience was rewarded with poppies and cornflowers.

A water source can also make the world of difference to visiting insects, on a hot day it can be the difference between life and death. If you have the space a pond will transform your garden into a wildlife haven. If not, you can make a bee bath out of a shallow dish filled with water and a few pebbles in it. The pebbles are an important addition as it allows bees and butterflies to drink without falling in and drowning. There are many types of bee hotels and bug houses available to buy which are very aesthetically pleasing but you do not have to buy these in order to provide shelter. Bees and beetles will be just as happy to nest in holes or in patches of bare soil and log piles, bushes and ivy are excellent for providing shelter in bad weather.



In just a few weeks our garden has transformed. As well as increased numbers of bees and hoverflies, we have insects that I have never seen in our garden before. We've had ladybirds for the first time and plenty of aphids for them to feed on. There are caterpillars in my carrots (I was upset at first but have decided to sacrifice my carrots to the greater good). There is a cinnabar moth that visits regularly and I'm rather hoping is going to lay some eggs in our ragwort. We have millipedes, centipedes and a rather sinisterly named Devil's coach horse beetle. And while they are not all pollinators, they are all part of a thriving ecosystem that works in harmony. And just as they cannot survive without each other, we humans cannot survive without them. I hope as people realise the importance of insect that we will see less well manicured lawns and weed-free flower beds and that we will all welcome a little more wildness into our gardens.





Photo courtesy of Alex Walker

# Forest Medicine

Words by Sarah Rosemary Hight

One of my happiest memories is picking wild blueberries in the Black Forest of Southern Germany. It's a simple memory, but I have always felt more at home in nature, whether it's walking through a forest, hiking mountains, or watching birds eat fruit from my compost bin. My preference for nature over the big city life has always mystified me until I learnt about the Japanese concept of Shinrin-Yoku or Forest Bathing.

In today's society, most people live in a town or city (or even a megacity like London or Tokyo). Although urban centres have had many benefits on our lives, such as through increasing job opportunities and centralising communities, they have also created a disconnect from nature which can be detrimental to our mental and physical well-being.

The human species evolved over 5 million years in the great outdoors, so it's no wonder that time spent in artificial environments is bad for our health. Urban living has been linked to increased levels of stress, anxiety and depression which reduces our overall quality of life. Over time, high levels of stress wreak havoc on our body which weakens our immune system and makes us vulnerable to illnesses like cancer or cardiovascular disease. What's more, the era of social media and digital distraction has led to even more time spent indoors, further reducing our exposure to natural light and fresh air, which are important for stimulating a healthy sleep cycle.

The benefits of nature have long been recognised across human history. Cyprus the Great famously created gardens in the middle of Persia 2500 years ago to induce calm and relaxation in the city. In the 16th century, German-Swiss physician, Paracelsus stated that "The art of healing comes from nature, not from the physician." While over in America, Frederick Law Olmsted designed New York's famous Central Park in the 1800's and called for the protection of Yosemite Valley. He stated that "the occasional contemplation of natural scenes of an impressive character ... is favourable to the health and vigour of men".

The first scientific evidence of the positive benefits of nature were collected in 1979 by the behaviour scientist Roger S. Ulrich who discovered that looking at scenes of nature induced positive feelings such as affection whilst urban scenes led to negative feelings such as sadness. In 1984, he published his most famous discovery that post-surgery patients with a view of nature needed less pain killers and recovered faster than patients facing a brick wall.

Shinrin-Yoku or forest bathing arose in Japan during the 1980's as a government initiative to combat growing levels of stress and depression. In 1990, Japanese Professor Miyazaki Yoshifumi started conducting experiments on the physiological benefits of forest bathing. His first study involved 12 students who were analysed before and after walking through urban and forest environments. Yoshifumi found that the men's cortisol levels, pulse rate and blood pressure were significantly lower after a walk in the forest compared to a walk through an urban environment. These findings sparked a variety of studies around the world on the effects of forest bathing and other forms of nature therapy. In 2009, Dutch researchers found that people living near green spaces had lower cases of heart disease, diabetes and asthma while another long-term study in Tokyo found lower rates of senior citizen mortality in neighbourhoods with plenty of walkable green space.

Forest bathing has now been part of a preventative health care programme in Japan for four decades. In 2018, Qing Li, (a doctor at Nippon Medical School and president of the Japanese Society of Forest Therapy) published his book *Shinrin-Yoku - The Art and Science of Forest Bathing*. The book brings together the last 10 years of his research on the benefits of forest bathing and has been published in 18 languages, bringing forest medicine to the world. Nature therapy retreats have now sprung up around the world and you can even train to become a Shinrin-Yoku guide. The growing scientific support for forest bathing has also prompted the creation of The Forest Bathing Institution in the UK, with the goal of making forest bathing a prescriptive form of preventative medicine across Europe.

To start your own Forest Bathing practice, here are the keys to forest bathing taken from Qing Li's book. To gain the full benefits of forest bathing, it's important to understand that forest bathing is not just about walking through the woods. It's about being mindful and fully present in a natural environment.

1. Find a forest or natural setting that is easy to walk along. The path should not be strenuous, difficult or dangerous as you want to be able to wander calmly and aimlessly.
2. Leave your phone, camera and other digital devices behind so you can be fully present during forest bathing.
3. Walk slowly and aimlessly. Forest bathing is about the journey and not a specific destination so just wander and enjoy the natural settings around you.
4. Use all your senses. Touch the trees or remove your shoes to feel the earth beneath your feet. What colours can you see? What does the air smell like? What sounds can you hear?

In the age of digital distraction and fast paced living, connecting to nature is more important than ever to reset and reduce stress. So, if you want to improve your physical and mental health while enhancing your overall quality of life, go get lost in the forest... doctors' orders.

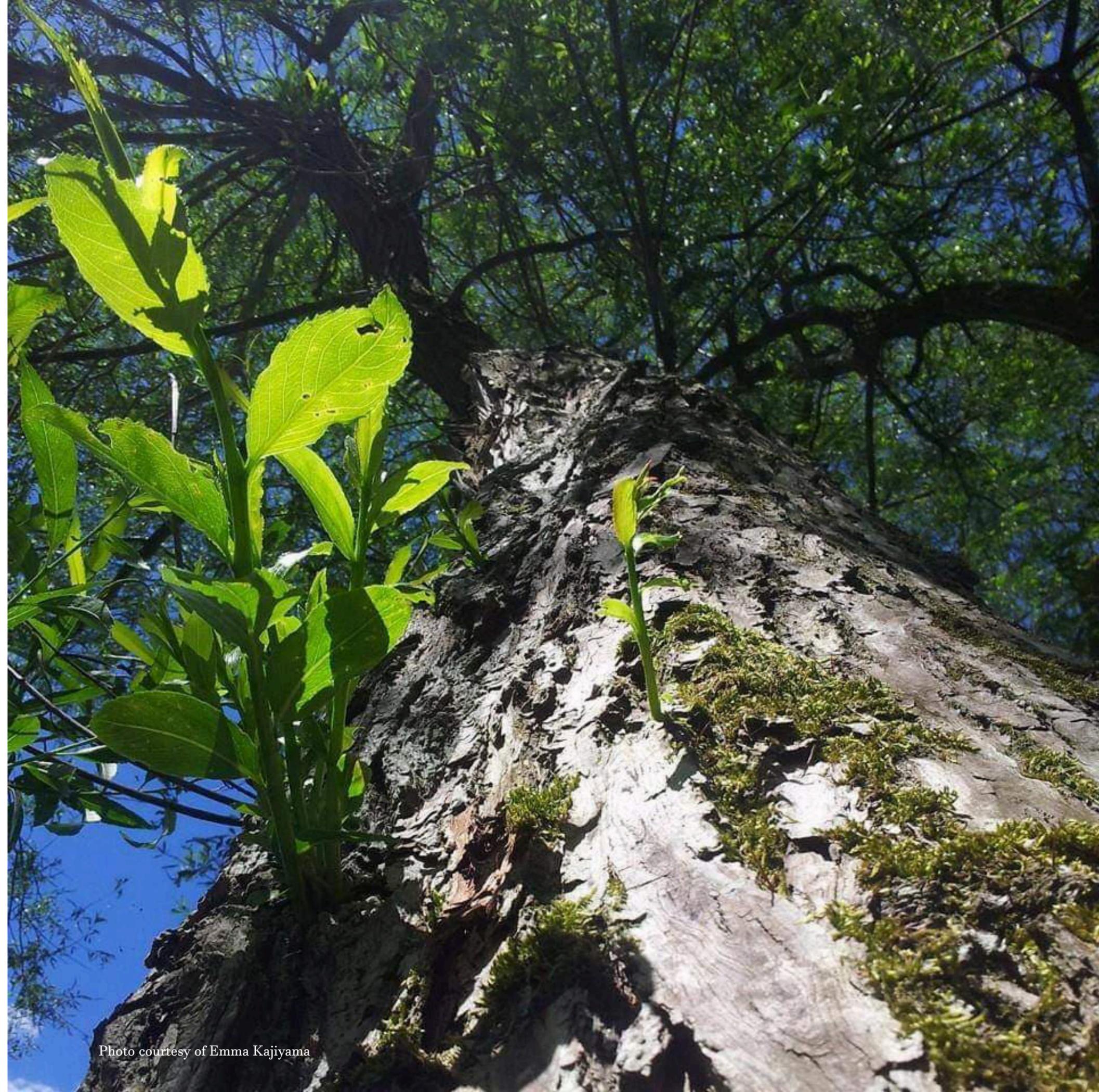


Photo courtesy of Emma Kajiyama

# To walk alongside our ancestors...

Owen Wiseman explores the relationship between the natural world and the evolution of the human body





# To Walk Alongside Our Ancestors...

Words by Owen Wiseman

Photos courtesy of [Shauna Wiseman](#)

The first modern humans emerged nearly 200,000 to 300,000 years ago. Approximately 70,000 years ago, they began to migrate out of what is now Africa. As biomes shifted from the open plains of the savanna to chaparral and tundra, ways of life were altered. This journey meant that Homo sapiens had to adapt to ever-changing and unfamiliar terrain. These changes would occur alongside the demands of those in a hunter-gatherer society. Demands that would include hard physical labour and venturing into precarious areas to stalk prey. This would hardly be a simple task. These humans lacked rifles or other hunting tools that would allow them to take down prey from a distance. They were required to get much closer, sometimes sitting in place for hours.

One might imagine the demand and strain these motions would place on tendon and sinew. Long to come were the days where specific muscles were targeted. The day-to-day tasks would often recruit large muscle groups, providing both power and stability. Running on the flat surface of a treadmill can hardly compare to the uneven and rocky terrain of the more boreal-temperate regions.

As innovations occurred, hunter-gatherer society shifted from migration to settlements. Crops were planted and nurtured and livestock began to roam as they became one of the primary sources of food. Rough forest and land gave way to common paths. Many of these early paths may have been forged in the era of transhumance as the migrating livestock tamped down the earth. This allowed humans to traverse heartier terrain and access difficult areas. Those large muscle groups may not have been feeling the same burn.

Stepping into nature and feeling the soft crunch of the forest floor as you run or walk evokes a sense of connection to our ancestors that no treadmill will ever provide. In our

industrialized societies and concrete cities, each year of new developments sets us further back from accessing nature. A growing movement of green exercise is emerging, where individuals step outside the tightly controlled climate of their nearest gym and into greenery.

Consider a marathon runner who trains on the flat asphalt of their subdivision when the weather permits. Road gradients tend to be so gradual that most hardly take notice when they find themselves looking down towards the neighbourhood. When we pluck this marathon runner from the asphalt to the forest, suddenly they need to engage muscle groups in a way their body may not be prepared for.

Running uphill recruits your gluteal muscles to help you maintain an upright posture. At a 7% incline, glute activation was 83% greater than running on a flat surface due to reductions in stride length and increases in stride frequency and ground contact time. Moving side to side as the trail before you meanders in and out also helps to improve lateral stability. The calves provide much of the power required to propel us through the woods. The biomechanic function of the ankle declines faster than that of the hip joint or knees. Creating stability through the calves by running on uneven terrain subsequently strengthens the delicate tendons and ligaments of the ankle, prolonging its function. Our quadriceps help us control our forward motion, especially moving downhill where a tumble forward may cause lasting damage. There tends to be less heel contact during downhill trail running because of the incline, forcing the quadriceps to activate and stabilize the runner. The core consists of various muscles including the obliques, rectus abdominus and transverses abdominus. They play a major role in helping us maintain stability as we twist our body to navigate over rocks, rivers and roots.



These physical benefits alone are indispensable and that is before one delves into the psychological. The scientific community has witnessed an explosion in published literature with a focus on the benefits of nature. Few are the ones who wholly despise time spent among the pines or by a body of water. There is something humbling about looking out thousands of meetings with no land in sight. Equally as awe-inspiring is standing beside a giant sequoia (*Sequoiadendron giganteum*) that can stretch close to 90 meters into the sky with a lifespan of 2,000 years.

Green exercise need not be as vigorous as trail running either. Even as little as five minutes spent exercising in nature, be it as simple as a walk, causes significant increases in self-esteem and mood. These benefits were even more robust when water was present. These include being able to more easily forget those everyday worries that burden many of us. This might explain why other scientists found those who exercise outdoors experience improved emotional well-being when compared to those doing the same exercise regime indoors.

Green exercise is also far more accessible as those of all ages can come together with the common goal of simply appreciating their surroundings. The social stigma of deeming oneself 'not fit enough' to be in certain fitness centres evaporates outdoors like the morning dew as it is met by the rising sun. Perhaps the little ones reach towards an oak bowing towards them as their grandparents reminisce on the temporal changes they have seen in the landscape. Nature does not ask for a monthly payment, but silently asks that you treat it with the respect and reverence that one who has provided for us throughout time is due.

When next you consider whether to pack your gym bag, perhaps find a nearby trail calling to you. As you dress to weather the elements, be it sun or snow, you may pause to consider that humans thousands of years ahead of you stood on the threshold of their own home, with a similar thought. With a deep and mindful inhale, you step out of your home and into the wild as you walk alongside your ancestors.



# Art & Conservation

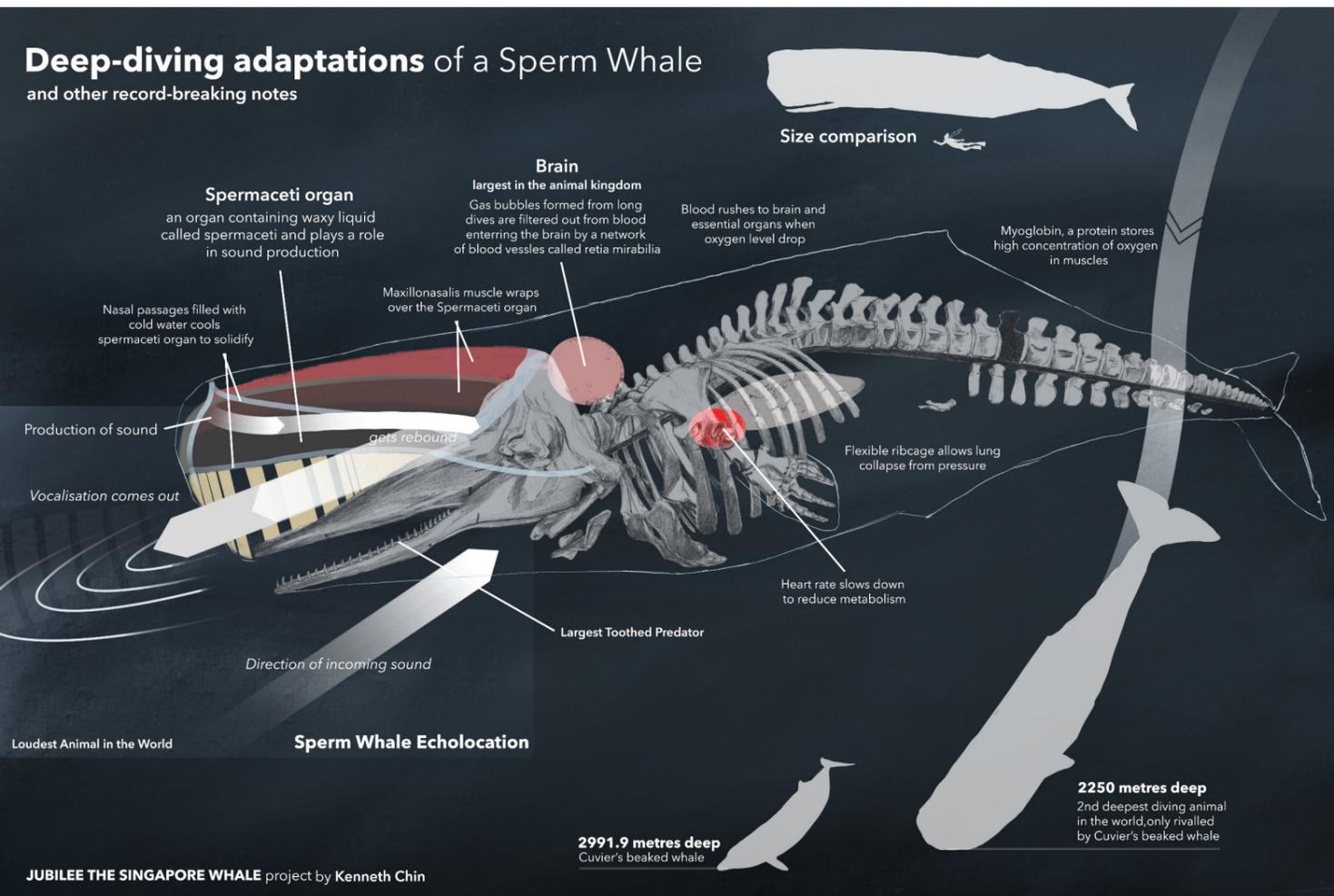
Words by Zoe Laurence  
Artwork by Kenneth Chin

As an environmental conservation graduate and an amateur animal artist, understanding the connection between the two, and finding ways to link them, is constantly in the forefront of my mind.

Art is a powerful tool; a subjective experience that can be interpreted by all, and it's here to tell a story. Through many different mediums, from photography and fine art to documentary making, fashion and crafts, awareness can be raised for current wildlife and environmental issues.

To name a few well-known examples, 'Chasing Ice', a documentary highlighting the severity of global glacial retreat, features beautiful time-lapse photography. The stunning visuals have enabled viewers to be able to fully envisage the extent of the issue, even shifting the opinions of climate change sceptics. A more renowned documentary series which also features striking cinematography, 'Blue Planet 2', kick started the 'Blue Planet Effect'. Previously, few people could grasp the fact that plastics litter the oceans, but now, it's becoming common knowledge. The prestigious 'Wildlife Photographer of the Year' competition is a global photography competition that showcases the very best nature photography. With categories ranging from, but not exclusively, animal behaviours, urban wildlife, black and white and photojournalism, it's inevitable that many different wildlife and environmental related stories will be shared in creative ways. Finally, a mural of Greta Thunberg half submerged underwater was painted on the side of a building in Bristol. Street art grabs people's attention and gets people talking, consequently spreading awareness, in this case, regarding climate change. In all the examples mentioned, the ways in which art was used, created striking images and caught the attention of many. In this way, the storytelling was successful, hopefully leading to positive changes.

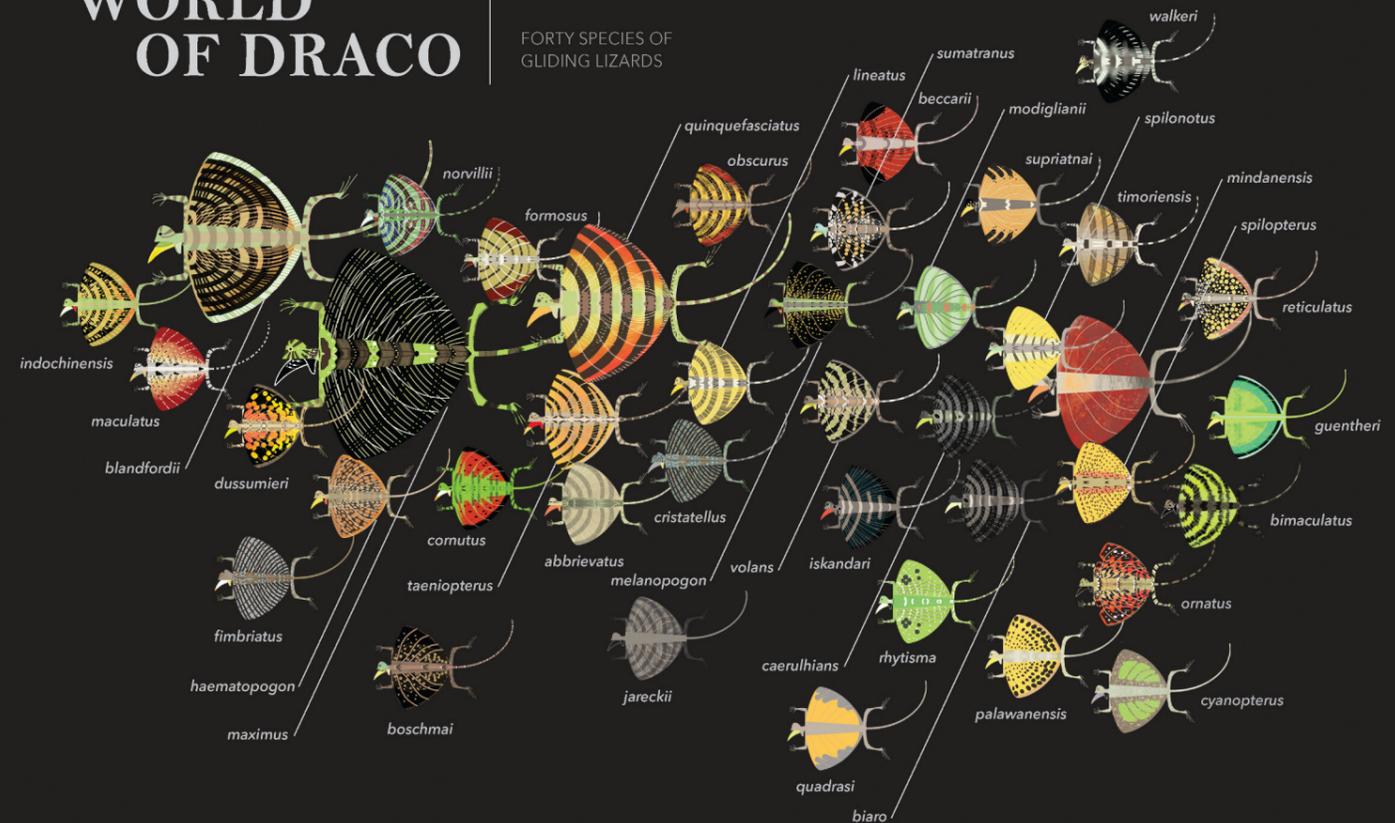
The science behind it? Many wildlife artists come from a zoology or related background, thus meaning they have a sound understanding from a scientific point of view. Messages they are portraying through their artwork are consequently more accurate. For example, learning and understanding your subject, predicting behaviours and body language or immersing yourself in your surroundings that you're trying to capture, will naturally result in better artistic outcomes.





# WORLD OF DRACO

FORTY SPECIES OF GLIDING LIZARDS



©Kenneth Chin 2020

Despite ways in which art and conservation go hand in hand, there is a flip side to this. Most notably, ethical issues can be raised in regard to animal use in art. Taking wildlife photography as an example, the vast majority of artists are ethical in their practice, but unfortunately, the same cannot be said for all. Seeing popular images of insects sat on frogs, individual animals strategically positioned to capture the 'perfect' image definitely raised some questions. These highly unnatural images were a result of animal manipulation often using string to attach them to these unusual positions, which is later edited out of the final image. Further images of frogs holding leaves as umbrellas are also questionable as a natural behaviour. Since frogs are semi-aquatic, why would they shelter away from some rain?

Art is truly an important source for environmental and wildlife conservation. We've all seen the viral photo of a seahorse swimming along with a cotton bud, it's embedded in our memories and is often the image people think of when discussing plastic pollution in our oceans. This is a prime example of how art and conservation are a great pairing. People are much more likely to remember a striking image over a paragraph of text that could depict the same message.

A lot of wildlife artists have the same motivation behind their work. Generally, they want to raise awareness and improve the state of the current global environmental and wildlife issues, be it through direct means such as donating some profits to charities, or purely through the story they are sharing through their art.



# A NATURAL RAINBOW

by Megan  
Johnson



I've been hand dyeing yarn for around two years now. I originally got interested in hand dyeing after seeing yarn dyed with avocado pits and creating the most beautiful shades of pinks. In those two years I've learnt a lot about natural dyeing and all the variables that can go into the colours you can achieve. Although this can make dyeing a bit stressful if you're trying to make the same colour for a large batch of wool. But I find it mind-blowing the different shades you can get from just changing a tiny thing in your dyeing process.

People around the world have been using plants to dye fabric and wool for thousands of years. Around 4,000 BC dyeing had become an established craft in India, China and some part of South America. Some colours were harder to come by, such as blues and purples, which can be achieved using indigo, but this dyeing procedure takes a lot longer and a lot more effort than other colours such as browns, tans and yellows. Because of this only very wealthy noblemen and royalty would own garments in these colours. The everyday person would use more of the plants that they found around them to make some equally beautiful but sometimes over-looked colours.

Oak trees are an amazing resource for natural dyers. All parts of the Oak contain high levels of tannins which can be used to mordant fibres before dyeing. A mordant is a substance that is used to help the dye colour bond with the fibre. This means a chemical mordant, such as alum powder, doesn't need to be used when dyeing with oak leaves, bark, acorns or oak galls, all of which give off beautiful earthy colours. Oak leaves dyed with wool that has only had an alum mordant creates a beautiful golden brown colour. If you add a bit of iron to that dye bath, the wool changes to a dark forest green colour. If you dyed the oak leaves with only iron and no mordant then you get a charcoal colour. All these colours are achieved using only one part of the plant, but changing a few steps in your process opens up a whole range of colours from only one plant. Dyeing wool with acorns can give very dark rich browns and oak bark and galls give varying shades of golden tan colours.

Another plant that has been used to dye fabrics with for hundreds of years is weld. Weld is often over-looked as a plant, it's usually found in more abandoned, overgrown, wasteland areas and it seen as a weed. But weld produces the most bright and brilliant yellows from just a few plants tops. It's very easy to dye with as it only requires soaking the flower heads in water over night and then placing the fibre into the dye bath the next day.



oak with a mordant



oak and iron without a mordant



white onion



oak and iron with a mordant



weld

Natural dyeing can often seem very overwhelming to a new dyer, but there are some plants that I would recommend to anyone who is interested in trying out dyeing. Onions are filled with tannins, which means no mordant is needed and wool can be dyed in any old pan that you have in your kitchen. I find onions magical to dye with, you just collect up the skins and ends of the onions you use over a few weeks and freeze them. Then when you have enough dye stuff, pop them into a big pan of water and boil them for around an hour. Once your colour is a strong colour, strain out all the onion bits then pop the wool in. Leave the wool to simmer for around an hour, then take it out to cool before washing it with a bit of washing up liquid to get all the left over onion bits out. You can use white and red onions for this. White onions creating a deep orange colour, and red onions makes one of the most beautiful greens I've ever seen. I've dyed with a lot of plants now, but the colour red onions make has captured my heart and I often find myself coming back to it time and time again.

I love dyeing with plants, and I can't wait to keep discovering more colours, and how the seasons may affect what shades of colours I get, how the pH of my dye bath affects plants and many other factors I haven't even considered yet. I find the colours I achieve with plants are so beautiful, even the most simple brown looks so much deeper to me because I know exactly how that colour came to be and the story behind it. There are still a few colours I've yet to discover, such deep reds, pinks and purples, but I'm determined to find them to complete my natural rainbow.

If anyone has anymore questions on natural dyeing then feel free to DM me on Instagram on [@homemadebymeg13](https://www.instagram.com/homemadebymeg13) where I will be more than happy to help with my still limited knowledge and experience!



1<sup>st</sup> row left to right:  
raspberry,  
black bean and red onion,  
black bean and white onion,  
a mixture of raspberries,  
red onion and white onion,  
turmeric.

2<sup>nd</sup> row left to right:  
acidic red cabbage,  
neutral red cabbage,  
alkaline red cabbage,  
a mixture of all types  
of red cabbage,  
cold dyed beetroot,  
hot dyed beetroot,  
oak leaves.

# International Features

There are many projects around the world who are working hard towards a more sustainable future. Nature's Gold wants to get these people noticed. We believe that anyone working for our planet deserves our recognition and full support.

In this issue we have highlighted the work of three projects on either sides of the world who are working hard to give back to our planet: Yupstead Garden, Blue Frog Farm and Xploregia.

To find out more about each project, check out the links provided.

If you would like your project or organisation featured in our next issue please email us:  
[naturesgoldmagazine@gmail.com](mailto:naturesgoldmagazine@gmail.com)



INTERNATIONAL FEATURES

# Yupstead Gardens

Interview with Jenn Auchter

Photos courtesy of Brittany Grubbs / BGVisuals





**Hi Jenn! Thanks so much for talking to us about your project! Could you tell us a bit about how [Yupstead Gardens](#) started? Where did the name Yupstead come from?**

My husband and I work for a major corporation in a huge city and, until recently, we lived on a 5000 sq. ft. lot less than 5 miles from the center of the 4<sup>th</sup> largest city in the USA. I really love to garden, and he loves to make everything homemade with high quality organic ingredients, whether that's pickling our own cucumbers or making tinctures from the herbs we grow. We felt really out of place in that urban environment, and we dreamed of having a homestead, somewhere rural where we could grow, gather, and hunt for our own food. We were stuck in the city, however, living this Young Urban Professional lifestyle because we were tied to our corporate jobs... "Yupsteaders" was born in those days, when we were yuppies living on a little urban homestead in the city. We've since relocated to a more rural area with a better growing climate, and we're continuing to piece together our homesteading dream, step by step.

**You must have learnt so much during the process – anything that particularly stands out for you?**

Our transition toward self-sufficiency has evolved quite a bit over the last 4 years – we went from living in an apartment with a small balcony garden to living on an urban homestead that was able to supply ~90% of our produce and herb needs, with meat sourced from our local CSA. We learned the ins and outs of composting, including aerobic, anaerobic, and bokashi styles. We cut plastic and non-biodegradable food containers from our home, we remodelled our house with environmentally friendly and non-toxic materials (cork flooring for the win!), and last year we even welcomed a cloth-diapered baby to our family. The biggest lesson for us has been that taking baby steps in your everyday routines really adds up to environmentally friendly self-sufficient lifestyle. Just start small, and before you know it, you'll be living your own yupstead lifestyle!

## INTERNATIONAL FEATURES

**Would you recommend growing your own produce to even novice gardeners / people who live in cities?**

Definitely. Especially now that we're limiting how frequently we go out into public, it's so nice to be able to walk out into the backyard and pick our dinner from the gardens. It's like having your own personal grocery store, with the freshest and best tasting produce that costs only pennies!

**I noticed you have started 'Yupstead Kitchen' – could you tell us a little more about this? Do you have any further plans for Yupstead Garden?**

[Yupstead Kitchen](#) is my husband's contribution to our Yupsteaders mindset – he is a wizard when it comes to cooking, preserving, and concocting anything in the kitchen, really. He uses a meal planning technique that he calls "cascade cooking" to minimise food waste, which is really important when you're growing it yourself! Through Yupstead Kitchen, he shares recipes and details of his process.

Ultimately, we envision Yupsteaders as a holistic movement that is much more than just self-sufficiency in the garden and the kitchen. We are currently researching and practicing foraging, fishing, and hunting skills, and soon we hope to begin making our own tools and household goods as well. It seems like we are always learning something new – even though I already have a PhD in Environmental Engineering and a master's degree in Earth & Environmental Sciences, I am currently working on a Permaculture Design Certificate as well. I hope to offer professional consulting services in the future, but for now, we are just helping our friends and family with their own journeys toward yupsteading, no matter what growing zone they're in or where they are at in their personal transitions. Our 2020 active projects include Zones 9, 8, and 5, and we hope to continue expanding in the 2021 growing season.





# Blue Frog Farm

## Interview with Julia Mulhern

Photos courtesy of Julia Mulhern

**Hi Blue Frog Farm! Thanks so much for chatting with us today. What kickstarted you to start a suburban farm?**

[Blue Frog Farm](#) is a small backyard suburban farm located in Wheat Ridge, Colorado, a suburb of Denver. It wasn't started intentionally, rather gradually came into being this spring as the pandemic progressed. In March the pandemic forced me to leave my short-term job in Bolivia and return to the US. With all my belongings in storage and unsure of whether or not I would return to Bolivia, I came to live temporarily with my sister Catherine Mulhern and sister's fiancé Charlie Rest. As Catherine and I were both working from home, wondering what would happen with the pandemic, and watching winter turn to spring, we decided to start a bunch of seeds indoors and began to make plans for a garden. By the time the seedlings were ready for transplanting in mid-May we had hundreds of plants babies that I was watering and carrying outside each day. Without realizing it, we somehow had over 120 tomato plants, tens of lettuce and kale seedlings, and a variety of cucumbers, melons, pumpkins, zucchinis, peppers, eggplants and all sorts of herbs. We gave away what we could, but I was so attached to them I couldn't bear to toss any out so we decided to plant them all and start a little farm in the yard.

**Have you had much experience with gardening before and what have you learnt during the process?**

Prior to this summer I haven't done any gardening to speak of, but I've always liked plants and trees. I'm a geologist so nature is a passion of mine. Over the last few years I've been growing lots of house plants but haven't had a yard for true gardening. In grad school I propagated spider plants all over my shared office, I should have realized how much I enjoyed it then! I think having a garden for the first time was one of the reasons I decided to dive in so enthusiastically. Catherine has a couple years of experience here in Colorado and taught me a lot over the course of the summer. I didn't believe her when she said our tomatoes would grow over six feet tall! As always, should have listened to my big sister.

## INTERNATIONAL FEATURES

### Did having this project help you during lockdown?

It's been great to have such a fun project during lock down. Each morning I tour the farm to see how things have grown and changed. It's given be something to look forward to and a way to spend time outside. There is joy and satisfaction in watching things grow and being able to create food from seeds alone, that has helped me stay positive. Its been really fun for us to have something we can do together as sisters, a chance to spend time together as adults. Creating the Instagram account has also allowed our friends and family to follow our progress which has been a great way to stay connected and develop community. Also, we've been donating a significant amount of produce to local shelters and food banks which has been a great way to help others in need during this hard time.

### What are your hopes for the future of Blue Frog Farm?

Blue Frog Farm has inspired me to pursue a [Permaculture Design Certificate](#) through the [Permaculture Women's Guild](#). I hope to use that knowledge to start my own permaculture in the future. It's been so empowering to be able to grow so much food on so little land. Blue Frog has shown me what is possible and how much fun it can be. I hope to carry that momentum forward into other farming and gardening projects, ultimately starting a business. Sustainable farming is central to combatting global climate change and building stronger communities. I hope to share the knowledge I've learned this summer, spread the joy of small-scale farming, and inspire others to start backyard gardens as well. Unfortunately, Blue Frog Farm will likely have to be smaller next year so that Catherine and Charlie can manage it while working full time. But we hope it stands as a neighbourhood example of what is possible.





The protruding rim of the cavity makes it easy for Helmeted hornbill to perch.

# Xploregaia

## Interview with Ravinder Kaur

Photo courtesy of Sanjitpaal Singh/jitspics.com

**Hi Xploregaia! Thank you so much for taking the time to talk to us about your project. Could you tell us a bit about Xploregaia - where you are located and how your organisation got started?**

We are Malaysians and we are based in Kuala Lumpur, Malaysia. I am a PhD student with University Malaya, and together with my husband Sanjitpaal Singh, a wildlife photographer, we set up a social enterprise to conduct research and conservation work on endangered hornbills. We felt the need to do something for our endangered hornbills before they go extinct. For the last six years, we have worked closely with a well-established NGO called HUTAN/Kinabatangan Orangutan Conservation Programme, Borneo. Together we build artificial nest boxes for hornbills, a cavity nesting bird that has lost most of its nesting resource due to historical timber extraction. We also grow hornbill preferred food plants for restoration work with HUTAN and we also restore natural tree cavities to make them suitable for hornbills to nest in. For more info click [here](#).

**Do you have any interesting facts or observations about the Hornbill? What is their role in the forest?**

Hornbills are known as excellent seed dispersers because they tend to regurgitate seeds undamaged as they cover great distances across the forest. Helmeted hornbills have a solid casque and are known to head butt in mid air due to territorial reasons!

**Does the Hornbill have any particular threats that are facing them at the moment?**

Habitat loss. Deforestation has greatly affected the hornbills. Hornbills are cavity nesters that are unable to create their own tree cavities. These cavities are formed by excavators such as woodpeckers or over time through heart rot. Cavities are usually found in large mature trees and occur at rather low densities in a natural forest. Hornbills reuse the same cavity, year after year, as suitable cavities are not easy to come by. In addition, nest cavities may deteriorate over years due to continued heart rot or entrance closure

(especially in fast growing pioneer trees). There's also competition for cavities and suitable cavities may even be taken over by other animals such as civets and insects such as wasps.

Hornbills such as Helmeted hornbills (critically endangered) are highly dependent on specific types of species of nest trees (mainly dipterocarps) and nest cavities with a protruding cavity that serves as its perching platform. The nest trees are large in diameter and 70m tall. Due to their unique structure of a protruding cavity, these trees are susceptible to storm damage and can fall easily.

**How did / has the pandemic affected your conservation work? And what are your hopes for the future of your wonderful organisation?**

It is ironic that funding for conservation has declined when the world is trying to survive a pandemic that was actually caused by blatant disregard to nature in the first place. Continued funding has been affected. Most of the conservation bodies rely on international

zoos for conservation grants. Many zoos have been forced to close due to the pandemic and their loss of revenue means there is limited funds available for conservation projects in the wild.

My hope is that corporates will step forward and offer help to assist conservation bodies during this time of crisis. Our organisation is in need of long-term commitment and support because we employ local villagers to carry out the conservation work in rural areas. To generate income during this crisis, we have also established an online [store](#) and we hope the public will help support our project by purchasing our merchandise such as hornbill themed colouring sheets and colouring books (available in digital form for download) and to purchase our unique handmade accessories such as earrings and pendants (featuring animals from the rainforest such as hornbills and cicadas)

[www.xploregaia.com](http://www.xploregaia.com)

FB & Instagram: xploregaia



# Photography Gallery

We love to showcase beautiful nature photography as images can often convey a message more succinctly than words. Particularly in the environmental sector photography, when done correctly, can be an important tool in conservation.

We also love to communicate our photographers love of nature, whether they focus on wildlife near their home or are photojournalists following a certain conservation story.

Whether you are a professional or just getting started and would like your work to be featured in our next issue, please get in touch:  
[naturesgoldmagazine@gmail.com](mailto:naturesgoldmagazine@gmail.com)

# Nick Bartrum

I have been walking in the wild places of the British Isles for many years, from as far afield as Scotland, to the Derbyshire Dales and the West Country, but the Waveney Valley, on the Suffolk and Norfolk border, has always been my home patch. It is a wildlife rich corridor, a lifeline between acres of patchwork fields and big open factory floor farming.

I have walked the Fenland footpaths here for more than twenty five years and enjoyed some mesmerising and enchanting encounters with the wildlife of the valley.

A few years ago, I decided to buy a camera with the aim of trying to capture the wildlife I encountered during my meanders. The challenge of getting close to nature is one of the most rewarding things I have ever done, and it is addictive.

It is my deep love of nature that keeps me going back. It is always a sanctuary and an inspiration.







Please check out Nick's wonderful blog ['The Fenland Wanderer'](https://www.nickbartrum.com/) for more incredible photographs (Fine Art Prints to buy) and nature writings: <https://www.nickbartrum.com/>



## Kenneth Chin

I'm Kenneth Chin, a wildlife photographer from Singapore and originally, my roots came from herpetology. Snakes fascinated me because of how they are both feared and admired for their beauty. Since then, I've always wanted to be identified as an animal lover, so I branched out into mammals, insects, birds and more! I am a wildlife illustrator by profession, so this hobby allows me to understand and apply what I have seen in the natural world through my art.





Please see Kenneth's incredible work [here](#)  
To see more beautiful photos, please see his Instagram page: [@kenlaphoto](#)



## Conny Thurman

I am German born and always had a passion for the outdoors, nature and wildlife. This resulted in volunteering for a local Wildlife Rehabilitation Center for several years, and then ultimately in the decision in 2017 to pursue my lifelong dream of becoming a Field Guide in Africa.

Having completed a 6 months training period at NJ More Field Guide College and another 6 months practical training at a lodge, I have been working as a Guide since - and it is my absolute dream job! Besides guiding tourists I mostly assist in training future Field Guides in ethical guiding methods and assist in conservation measures such as relocating or monitoring endangered wildlife species.

Being highly privileged to spend so much time out in the African bush and experiencing this amazing ecosystem and its intricate interconnections, I just felt the need to capture and share some of these precious moments with those endangered animals.

Location: Marataba Private Game Reserve, situated north of Johannesburg in the Waterberg Mountain Biophere, which is an absolutely stunning reserve, with diverse landscapes, amazing rich birdlife and besides the BIG 5 also home of Cheetahs, Spotted Hyeana, Brown Hyeana, Aardvark, Pangolin, Aardwolf and many more. Its Conversation model is a very successful unique public-private partnership, when staying at the Conservation Camps guests can actively participate in these measures.

Currently due to the Covid 19 situation I am "stuck" in Germany, but will return to Southern Africa as soon as possible.

Conny Thurmann  
PHOTOGRAPHY & GUIDING



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PHOTOGRAPHY & GUIDING

To find out more visit:  
<https://www.marataba.co.za/>  
and [@marataba](#)

or check out Conny's Instagram  
page: [@connyt13](#)

### Connect with us!

Nature's Gold is a community magazine.

If you or anyone you know is interested in becoming part of our community please get in touch.

If you would like to write an article, please email us a pitch of your idea: short article up to 600 words, long article between 800 – 1200 words.

Nature Photographers: We would love to feature your work! Please email us 3 of your favourite photographs that you have taken, plus the location of the photographs, a bit about yourself and why you got into nature photography. We will credit your work and share any other nature projects or websites that you would like to highlight.

We are on the lookout for volunteers to help with:

- Social media + Marketing
- Writers for Interviews for future issues
- Editors for our project features

Our new website is now up and running!  
[www.naturesgoldmagazine.com](http://www.naturesgoldmagazine.com)

We want it to be a hub for our environmental community, inclusive of all genders, ages and cultures.

Please get in touch if you have:

- Wildlife Cams you would like to feature on the website
- Environmental artwork or items that you would like to advertise
- Job/Volunteer/Internship/course opportunities in the environmental sector that you would like to advertise
- Environmental podcasts that you would like to highlight or host on our website.

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