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# RE-USE

A pink wavy line that starts at the top left and curves upwards and to the right, ending at the top of the word 'REDUCE'.

# REDUCE

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# RECYCLE

Talks between leaders about Climate Change, and species that are struggling with our current climate, and resolutions to Climate Change. "It only takes one step, but from everyone, to make a movement."

**“OFFER A SOLUTION  
TO THE NATURAL  
WORLD AND IT  
WILL RUN WITH IT.”**

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# SAVING ENERGY



Eat less beef and pork, Use energy efficient light bulbs, Don't keep a phone battery charging over 100%, Recycle glass, plastic, paper, aluminium, and steel. Recycle paper means fewer trees cut down, metal means less ore mined out of the ground, bring your own bag is a popular choice in UK supermarkets, along with bring your own cup to coffee shops and bring your own box to cafes becoming a popular choice for many. If you are driving your car but have been in a queue for a few minutes turn off the engine, this saves for a lot of energy.



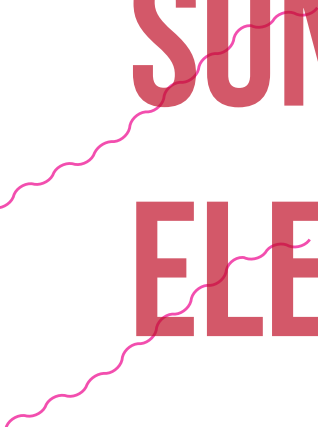
# MEDICINE


# DISASTER

“Newman tells the story of a researcher who in the late 1980s collected samples of biological material from a certain type of algae growing among mangroves on the coast of a Caribbean island. Tests later showed that the algae contained what seemed to be a promising new anti-tumour agent. But when the researcher returned, the mangroves had been uprooted, and the area filled in and turned into a golf course.”- Extract from the article “The Future of Medicine May Depend On The Most Fragile Places On Earth”- 2004, Kevin Loria, on David Newman, chief of the Natural Products Branch of the National Cancer Institute, US.



**“WE COULD FIND A  
WAY TO CAPTURE  
SUNSHINE AND STORE  
ELECTRICITY”**





When Sir David Attenborough met President Obama there was discussion on topics about future species and underlying issues to resolve including population control, creating more opportunities for young women and opportunities in poorer countries- to learn more: this results in smaller families. Birth rates falling would lead to a more stable population, we might then have enough resources for everyone in an ideal world.

Together both David Attenborough and President Obama have experiences of spending days outside in their younger year. This is the sort of experience that can enrich your life, it is the type you do not quite capture anywhere else- not even on a virtual reality headset. President Obama understood the necessity to look after nature from a young age, and many

children share the same fascination from a young age they wonder if ever this fascination were lost somehow, how do you gain and seek this wonder out?

A reasonable way to stay in contact with nature is to be able to seek a greener area, a place to explore that is unfamiliar to the town or city you are used to. The world has vast expanse and to be able to experience nature that hasn't been ruined from time-to-time is good for the soul. Rising water temperatures is a problem, if we could find a way to capture sunshine and store electricity that could be a way forward. The solutions to the problems we are faced with are global. Finding ways to regenerate and store power might help to eradicate problems with carbon... Having some control over keeping the natural world, natural.

**“HE’S BUILDING  
SOMETHING THAT  
SERVES THE INTERESTS  
OF EVERYONE.”**



“The UK produces somewhere in the region of 500 million metric tonnes of carbon emissions annually. Mature, dense forests are amongst the most effective carbon capture and storage sinks that we know. Paul Lister, the heir to the MFI fortune, having already planted over 800,000 trees, intends to reforest and rewild some 50,000 acres of Scottish highlands. These facts speak for themselves. Regardless of what you think about Paul Lister – madman, businessman or philanthropist – what he is doing is nothing short of exceptional. Though, for some reason a naive group of ramblers tend to disagree.

Now, we’ve heard it all before, the incessant humdrum tones of free-thinking, liberals badgering on about the importance of tackling global warming. As they tell us again and again the same old hypotheses of what’ll happen if we fail to take it seriously, it’s easy to switch off. It’s not that we don’t believe them. It’s not that we don’t care. It’s that we feel unempowered, entirely incapable of contributing toward any significant change. The fact that the UK has approximately 220,000 farmland

holdings which cover roughly 71% of the land mass, underscores the issue. With a population approaching 65 million, this equates to roughly 0.34% of the population controlling what we do with the vast majority of our countryside (and country!).

Unfortunately for us, our farmers are encouraged to keep their land in ‘good agricultural and environmental condition’ (GAEC) in order to receive full government subsidies. Which, skipping all the technicalities, requires keeping the land clear of any foliage to enable grazing, water flow, land conversions, etc. Whilst many farmers argue for the necessity of vast grazing pastures, the evidence is heavily stacked against them (see George Monbiot’s Feral or his blog for details). Ultimately, this means that taxpayers, the unempowered majority, are paying farmers to destroy the land. We finance a subversion of landscapes which are, or could quite easily become, effective carbon capture and storage sinks. In turn, we create broad, bare and lifeless areas, uninhabitable to the majority of our native fauna.

This is why we switch off. When presented with the facts about global warming, most would agree that creating carbon-absorbing landscapes should be at the top of our priorities. Mitigating the inevitability of widespread population crises, the consequence of a world torn apart by extreme weather systems, with food and resource shortages and inexorable political mismanagement, is clearly in everyone's interest (mine, yours, all systems, states and businesses, even ramblers; everyone's!). Yet, it appears we're doing quite the opposite. Far from mitigating, we're proliferating, and it feels almost impossible for us to do anything otherwise.

And that's why Paul Lister's plans are admirable and why the ramblers ought to retract their condemnation of his work: Lister is going against the grain. He is doing what the disenfranchised would do, had they the power. He's building something that serves the interests of everyone. He's building a carbon storage sink, and we ought to encourage more people in comparable positions to do the same.

In an attempt to avoid appearing entirely biased I will concede that the subject of the ramblers discontent truly is an issue, albeit one of far less magnitude. Lister's vision of rewilding his Alladale Estate is controversial for a variety of reasons. Not least being his plan to fence off the entire area, which currently spans 23,000 acres. Not only would this cut off a number of public footpaths (potentially contravening The Countryside and Rights of Way Act 2000) but having recently applied for a zoo licence, some believe Lister intends

on creating a lucrative paradise for native fauna, simulating private South African wildlife reserves which allow access exclusively to those wealthy enough to pay a hefty premium. So, those who disregard Lister's plans do so for reasons of law, liberty or equality.

I tend to sympathise with these arguments. I think it'd be an incredible feat if we were able to ramble on throughout a rewilded highlands. Just imagine walking through a vast densely packed forest with trees as thick as coaches are long, exploring natural marshlands, rivers and lakes, following the tracks of elk or wolves even, watching nuthatches break nuts upon the trunks of trees older than our great-great-great... great grandfathers, or sea eagles plummeting through the canopies; imagine being able to appreciate the true honesty of a healthy and diverse natural woodland. That being said, tackling global warming clearly supersedes any desires we have to explore an enchanted wood or quell issues of liberty and equality. It's not that liberty and equality are unimportant – far from it! It's that when sacrifices are necessary, we mustn't sacrifice our chances of escaping the event horizon of global warming.

I'm not entirely sure what Lister's bigger plans are. I'm also undecided as to whether he yet deserves the title of philanthropist. But I do know that his rewilding projects are extremely commendable and serve to preserve something much greater than a mere walkway.

Quit rambling, ramblers.

A.C. Stark"

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Animals are very important they hold the key to new medicines and cancer treatments. Now 8 in 10 children could survive cancer, compared to the 1960's only a quarter would have survived.

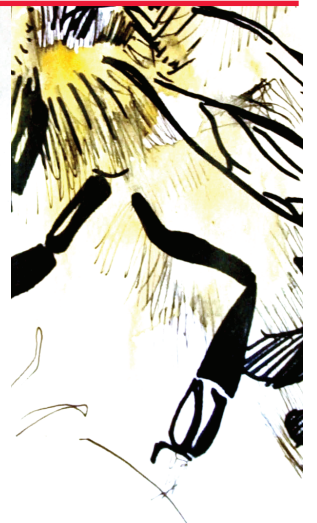
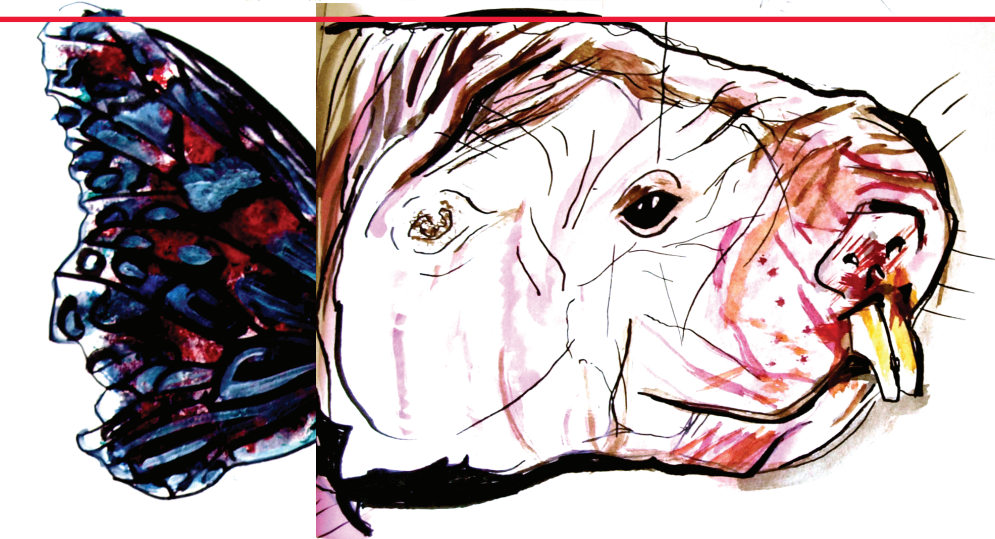
Naked mole rats in particular are a great interest for Scientists for a number of reasons: they are immune to cancer. There is a female 'queen' mole rat and the male workers are all either sterile or fertile. More bizarre findings: mole rats do not feel any pain, and can outlast chimpanzees in age span, they have a high life expectancy for such a small creature.

The honey bee is a top pollinator, without bee's coffee would be hard to get hold of, almonds would not exist, and 70% of crop species. Climate change, Varroa parasites, viruses, and pesticides are contributing to extinction of the species. Varroa has been dormant but the addition of a warming climate can make the virus

thrive. Bees are important because the venom (melittin) may contribute to tackling HIV, and aid rheumatoid arthritis. Melittin is the burn in the sting, nanoparticles carrying Melittin can puncture holes in the protective casing of HIV. Melittin has also proven to be useful in cancer treatments.

Sea Anemones can be found in the Caribbean, offering a guiding light towards new drugs such as Dalazatide will not suppress the immune system and instead block ion channels that might go off-kilter in autoimmune diseases. This might offer solutions to multiple sclerosis, rheumatoid arthritis, psoriasis, and lupus. Sea Anemones have venom filled tentacles to guide the prey into their mouths. It is the anemone venom used to destroy their prey that is of interest to Scientists.

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Arctic Ice is melting 9% per decade.  
300/350 North Atlantic whales left,  
the temperature of the water is causing  
problems with the amount of plankton for  
the whales. 3,200 tigers left in the wild.  
Approximately 80% of drugs used today  
to fight cancer and other infections are  
found in nature.  
If nature is being threatened, you are  
being threatened. If a part of a forest is  
lost of some bit of nature ceases to exist it  
is unknown to the extent of damage that  
that could cause.

# “IMPOSSIBLE ISN'T A FACT” - CHRISTINA FIGUERES (TED 2016)

“In 2009, six months after a spectacularly failed climate change summit in Copenhagen, Costa Rican diplomat Christiana Figueres was appointed executive secretary of the UN Framework Convention on Climate Change. Her job: Leading the next round of international climate change negotiations.

At that time, no one believed that we could ever get a global climate change agreement. “In fact,” Figueres says, “Neither did I.”

Tasked, essentially, with saving the planet – with full responsibility and absolutely no authority, as all governments are sovereign – Figueres panicked.

In her first press conference in her new official capacity, a journalist asked Figueres if she thought a climate change agreement was possible. Her response: “Not in my lifetime.”

“You can imagine the faces of my press team,” she says, “who were horrified at this crazy Costa Rican woman who was their new boss.”

Six year later, that horror has turned to

optimism.

On December 12, 2015, in Paris, under the United Nations, 195 governments came together and decided, unanimously, to intentionally change the course of the global economy in order to protect the earth and improve the quality of life for all of us.

So how did this remarkable achievement happen?

“Impossible is not a fact, it’s an attitude,” Figueres says, thinking back on that first press conference. “And I decided, right then and there, that I was going to change my attitude, and I was going to help the world change its attitude on climate change.”

She had no idea how we were going to solve climate change, but she knew we had to change the tone of the conversation. “There is no way you can deliver victory without optimism,” she says.

So she channeled courage, hope, trust, solidarity and the fundamental belief that we humans can come together and help each other to better the fate of mankind. And for six years, she has stubbornly and relentlessly injected optimism into the

We began to see that clean technologies, in particular renewable-energy technologies, began to drop in price and increase in capacity," she says. These new technologies bring us cleaner air, better health, better transportation, more livable cities, more energy security and more energy access to the developing world. "In sum, a better world than what we have now," Figueres says. Perhaps more important, the economic equation changed, and the realization that clean technologies could improve the bottom line set in across industries.

The shift caused a change in perspective on the part of governments, who realized it was now in their national interest to engage in sustainable development. They were ready to converge onto a common path, and 189 governments submitted comprehensive climate change plans, the measurement and reporting of which is legally binding, to the UN.

"The checkpoints that we're going to have every five years to assess collective progress toward our goal are legally binding," Figueres says, "and the path itself towards a decarbonized and more resilient economy is legally binding."

Whereas before we had a small handful of countries who had undertaken reduced, short-term emission reduction commitments, now we have all countries of the world contributing with different intensities and approaches to a common goal.

"Once you have all of this in place and you have shifted this understanding, then you see that governments were able to go to Paris and adopt the Paris agreement," Figueres says.

Figueres describes the day that agreement was signed: 5,000 people, jumping out of their seats, crying, clapping, screaming, yelling, torn between euphoria and, still, a disbelief at what they had just seen.

"I'm the first one to recognize that we have a lot of work still to do," Figueres says. "We've only just started our work on climate change ... But I do believe that we have come, over the past six years, from the impossible to the now unstoppable."- TedTalks blog,

# “HAVING SOME CONTROL OVER KEEPING THE NATURAL WORLD NATURAL.”

The Paris agreement and the Copenhagen agreement in 2009 have something in common. They both haven't gone to plan. Scrapping energy efficiency schemes, the consumption to burn less fossil fuels, are negotiable- of course this should be limited. The recent data recorded is the highest on record in a million years for the amount of carbon used. Dealing with climate change means getting out of fossil fuels. The focus on the temperature rising is that we must not go above 2% but we are possibly going to be reaching 3%. This is dangerous and global warming is a bigger issue, than where it currently is in the priority list.

George Monbiot also agrees we need to do something ourselves. Flying less, eating less meat in our diets, driving less or not having as much need for cars. Also

not leaving a phone charging past 100% full battery. Admittedly there is pressure on companies who invest in carbon, do they invest in high carbon or low? We need insulated houses, cleaner vehicles, according to SMMT new cars which are diesel contribute 20% less carbon than a normal car (SMMT is the trade association for the UK motor industry) . There are steps forwards but it should happen faster. New technologies are not always worth investing in, artificial trees which consume CO2 are incredibly expensive and it is hard to ensure how reliable they might be. Utilising the sun and capturing the sun could compete with other non renewable energy. A carbon tax is an idea that may work, it would need a lot of consideration. What this is all about is consumption, and a need to control consumption.







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