

## Thoughts on Climate Change - written by Andy Holdaway, Estate Manager at The Garden House

The evidence has piled up so high - climate change is a reality. So what is my point? What is really worth discussing is the seriousness and the need for everyone to collectively try and steer our path to something better. The more you look into the situation for yourself, the more you can understand just how important it is for us all to do what we can to reduce climate change and to help others to make a difference - not later, not when convenient, now.

4 years after its production, I recently watched *Chasing Coral*<sup>1</sup> (available on Netflix, Youtube, etc.). I hadn't heard of it, but now that I have seen it, it really is a call to action, one of very many.

Coral death is just one casualty of climate change happening within the lifetimes of the current generation of humans on our planet. It is one of the many ecosystems on which other life depends, but it is such a big part and though we are away from the sea at The Garden House, we need to understand the interconnectedness of everything on our planet.

'An estimated 25 percent of all marine life, including over 4,000 species of fish, are dependent on coral reefs at some point in their life cycle.'<sup>2</sup>

With diminishing fish stocks from unsustainable fishing practices and more recently unexplained massive loss of crustaceans such as crabs<sup>3</sup>, what happens in the sea ultimately comes back to impact our lives on land. I think what really hit home about the film *Chasing Coral* was the impact that a couple of degrees of warming has on particular living organisms. The way corals live exposes it to the warming of the sea - like us being warmed by 2 degrees, imagine being warmed internally from 37 to 39 degrees - we wouldn't last long in a state of perpetual fever. That is the situation for coral in seas being warmed by two degrees. It can't cope and an ecosystem dies - that's all the creatures that rely on that coral going with it.

Couple this temperature rise with a decrease in ocean pH level and the situation gets worse. Much has been written about the 'acidification of our oceans'<sup>4</sup>. Greater levels of atmospheric CO<sub>2</sub> combines with H<sub>2</sub>O to form more carbonic acid in the seas, and marine organisms find it increasingly harder to build their shells and coral formations of calcium carbonate. Beyond the devastation of lost coral reefs, which really is devastating when you see it, there is also the loss of the carbon sink function, which would lock carbon into the sea environment, and the loss of food chains on which we have come to rely.

We might as well continue and say that the oceans are the major sink for the heat created in the atmosphere as well as a sink for CO<sub>2</sub>, so it is not good that with an increase in sea temperature comes a reduction in the ability of the oceans to absorb CO<sub>2</sub><sup>5</sup> - and there is concern for the oceans releasing rather than absorbing CO<sub>2</sub><sup>6</sup>.

Looking at the last few hundred years, the impact humans have had on Earth is so rapid when compared to the the millions of years that Earth has existed and evolved. Our 'business as usual' thinking is often so vastly at odds with natural ecosystems that we

need to see how all the little impacts of our actions add up, and really do what we can to fit with nature rather than clash with it.

It is a mistake to underestimate the effect that our individual choices make, because these are what add up to create the whole impact and each person making choices knocks on to what others do - the things we buy, the way we travel, the food we eat, the way we manage land and (try to manage) nature, etc. We can't help but notice what others are doing and if we are seen to be doing something, others will see that as a guide to their choices.

"Oh look, they are cycling to school, we could cycle to school." ('Sometimes' is better than no times)

More cyclists equals more perceived need for cycling infrastructure and greater understanding of cyclists needs, leading to more cyclists and less pollution - just one example of individuals' choices leading to progress for others.

More understanding of some farmers practices being bad for the environment and choosing food grown in a better way equals more demand for better grown food. Farmers who carry out poor practices will be forced to farm differently for economic reasons, if for no other reason.

Are we buying products from clear felled rainforest - teak, palm oil, soya, cattle meat? Looking in to where products and food really come from and the impact that they have is very valuable. If the origin is not known, it is probably best to expect the worst and look for alternatives with green credentials and an ethos of caring (not to be compared with 'greenwash').

I recently heard that if all farmers changed the way that they farmed and stopped deep ploughing this could have a massive impact on the amount of CO<sub>2</sub> released into the atmosphere - just one of the many solutions. Supporting farmers who are making changes to greatly reduce carbon release is just one of the things that we can do. I feel that it is our duty to ask about these things that we don't necessarily know about - who is doing the good stuff? It always seems that when there are enough voices on a subject things change. I feel very aware that I should speak up more for what I believe in, hence this piece of writing. I hope it helps.

Supporting energy providers working towards renewable energy equals more demand and progress towards getting away from fossil fuels. Greater understanding of the full carbon requirements of nuclear fuel is also worth understanding and consideration for the management of the radioactive waste and risk, both now and in the hundreds and thousands of years ahead, compared to the lower risks and adaptability of much renewable technology. The Garden House currently uses Ecotricity<sup>7</sup> for its energy to try and support best practice in energy production.

It frustrates me that those in charge of our country don't seem to work to create the best environment for us to live in for the health of us, the planet and all of the other wonderful life on it. Please aim higher! Letting everyone know how important looking after our planet is to us cannot be underestimated, whether through voting, daily conversations, conversations with decision makers, representatives, social media, direct messaging,

letters or other ways which constructively and healthily inform decision. Isn't it better to spend some more of our hard earned money on looking after the planet and ultimately our mental and physical health than going out with a bigger bank balance?

Where possible, within our means, choosing products and services which genuinely support our champions of good practice seems a better focus than those pushing the best prices for the sake of profit or self interest.

Having a 5 year old son has been a good reason for me to read *The Lorax*<sup>8</sup>, a very effective story about the perceived need for *things* driving the depletion of resources, but I would have done well to have read it at some point, anyway. Dr. Seuss, you clearly make your point!

The kind of people involved in projects like The Garden House often seem to be quite like minded in concern for our planet and its many environments, so I hope we can act as something of a hub for local people involved to share knowledge on the good practices out there and the good actions that we can support. Thank you to those who have helped me to learn more.

As a sustainable land project, The Garden House is a place where you can learn about good practice for reducing climate change. We are happy to help people learn about food growing, learn the value of 'dead hedging'<sup>9</sup> instead of burning garden waste, composting instead of creating methane producing food waste, planting and growing trees to absorb carbon, no-dig growing - reducing carbon loss from soil, building soil carbon content and holding onto carbon in soil - I would like to add biochar/charcoal to our soil for this purpose of locking carbon in. Our casual exchanges have included discussing holidays in the UK, reducing the need to fly, reduced meat consumption, healthy diets and ways to enjoy the experience - little nuggets of knowledge and experience coming together, helping build our collective reduction in damaging climate change. We have unfortunately also had conversations on the subject of adapting to climate change.

We are supporting the growing of good, sustainable practice.

With a solutions focused approach, I wish you, "Good luck, Everyone", and please help to spread your knowledge of ways to a sustainable future.

Andy Holdaway, 15th December, 2021

### **Note from Andrew and Caroline**

When we developed our plans for The Garden House almost ten years ago, we set out to create a model environment through sustainable use of the land and buildings, adding value to the community, enhancing knowledge and understanding, promoting well-being, and leaving a legacy for the next generation. Whilst these were only words at that time, the infrastructure and environment we have been able to put in place, and continue to develop, has underpinned this thinking. And the energy and knowledge that Andy has invested in the project has brought to life many of the key elements outlined in our Vision.

He has achieved this in collaboration with the local community. The steps we are taking seem tiny in a global context but, as Andy emphasises, our individual contributions and knowledge sharing can be powerful tools in the fight against Climate Change.

<sup>1</sup> *Chasing Coral* - A film by Exposure Labs  
<https://www.youtube.com/watch?v=aGGBGcjdjXA>

<sup>2</sup> <https://www.epa.gov/coral-reefs/basic-information-about-coral-reefs>

<sup>3</sup> *'Apocalyptic': dead crabs litter beaches in north-east England* - The Guardian, 29.10.21  
<https://www.theguardian.com/uk-news/2021/oct/29/apocalyptic-dead-crabs-litter-beaches-north-east-england>

<sup>4</sup> [https://en.wikipedia.org/wiki/Ocean\\_acidification](https://en.wikipedia.org/wiki/Ocean_acidification)

<sup>5</sup> <https://www.carbonbrief.org/new-study-suggests-oceans-are-losing-the-ability-to-absorb-carbon-dioxide>

<sup>6</sup> <https://en.unesco.org/news/unesco-cautions-ocean-risks-losing-its-ability-absorb-carbon-exacerbating-global-warming>

<sup>7</sup> Ecotricity - green energy supplier  
<https://www.ecotricity.co.uk/>

Free Carbon Footprint Calculator available on the Ecotricity website - see how you are doing! - A bit crude, but doesn't take long and might help.

<https://www.ecotricity.co.uk/our-news/2021/try-our-free-carbon-footprint-calculator>

<sup>8</sup> *The Lorax* - Dr. Seuss  
<https://www.youtube.com/watch?v=VImgIPxfRbs>

<sup>9</sup> [https://en.wikipedia.org/wiki/Dead\\_hedge](https://en.wikipedia.org/wiki/Dead_hedge)