

Cranleigh Environmental Action Group - No PLANet B

Welcome back!

Welcome back to the Eco-blog - thanks for returning! This term has been a busy (and extremely confusing) one for all eco-friendly Cranleighans. We have all tucked into Meat Free Monday, purchased some fresh garms at the Second-hand Clothes Sale, and hopefully started becoming more conscious consumers as a result of The Pledge.

In this term's blog, we are looking to introduce you to the next generation of Cranleigh Eco-warriors, with some incredible featured articles from a range of people.

Sadly our U6th time on the eco - committee has been cut short by unforeseen pandemics, so this issue will be looking at passing the baton on to the next generations of green machines.

Maddy (editor).

What's In This Issue?

- Welcome back!
- Meet the Lent Term heroes
- 'For Oceans Sake' Olivia Meanley
- 'Engineering and the Environment' - Tom Boddington
- How minorities change the World - Jess Edwards & Emily Benkert
- Planetary - Bob Edwards
- The Low-down
- The Long Read - Meadow Place Like Home by Dr Chris Sandom.
- The Final Word.

Call for articles.

This term we've got some amazing writing from Cranleigh students but we always need more, especially if we're going to be doing this remotely! Please send us your Eco based work, a record of something environmental you've been doing at home or anything that symbolises Cranleigh being an 'Eco' school. If you win, you will receive a Headmasters Commendation and eco-products.

Send your entries to: eco@cranleigh.org



[@cranleigheco](https://twitter.com/cranleigheco)

How You Can Help.

Want to help? Getting involved is simple!

The first thing you can do is sign **The Pledge**. More on this later in the newsletter.

Want to do more? All you need to do is speak to or email any member of our team!

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Meet the fresh faces!

Here are some of our amazing new recruits who have helped us out in many different ways this term. When us old U6th have gone it's down to people like this and people like YOU to keep Cranleigh green. Come and find us or drop us a line at eco@cranleigh.org if you want to be involved!

Toby Escolme - Mr Leamon - Kasim Shariff - Mrs Gray

Holly Lygoe - Maya Magee - Dasha Motusko - Bella Rowe

Lucy Southwood - Kian Pashapout - Lauren Beaumont

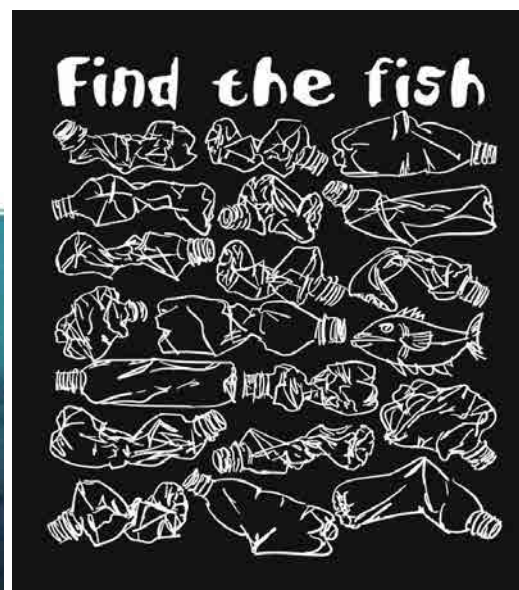
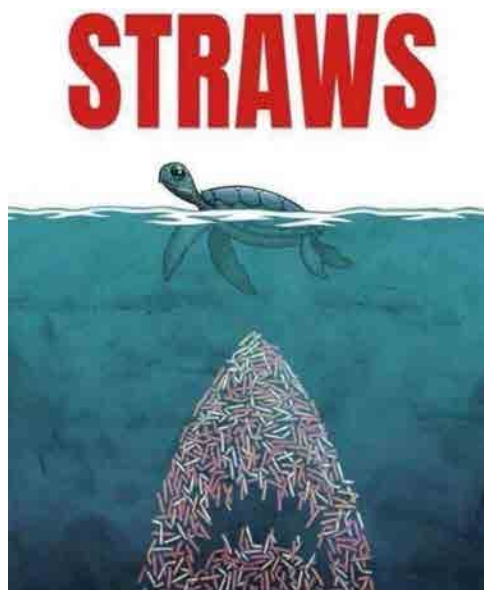
Ed Brounger - Georgie Meadows - Oyinate Adegbite

Georgie Turnbull - Jacopo Bounous - Charlie Morgan

Mr Butler - Eve Cassidy - Thomas Evans - Kitty Clements

Amy Quinn - Bella Rowe - Sophie Grossmith - Jess Edwards

Bob Edwards - Tom Boddington - Olivia Meanley - Emily Benkert



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A Reminder of 'Our Mission'

A reminder of what we are doing. We decided to use the word 'Action' in our title because we wanted to be a group that actually got things done and made a difference. This is our mission statement showing you what we want to achieve this year.

Our intention is that *all* members of Cranleigh School community shall:

- Understand the need and necessity to take immediate action on environmental issues.
- Take practical steps to adopt a more sustainable lifestyle, both personally and *as a community*. This will include, but not be limited to: energy usage, recycling, sustainable products, lifestyle choices, food waste.
- Actively seek to educate, engage with and support others on environmental issues both inside and outside the Cranleigh community.

We will achieve this through:

- Actively seeking and actively providing opportunities to learn about the climate emergency and sustainable living.
- Devising and implementing a series of aspirational, yet achievable, practical goals, schemes and policies.
- Working with pupils, staff and other members of the Cranleigh community to help them adopt our policies and ideas.
- Inspiring others by our own actions.
- Engaging in direct action when deemed appropriate.

Our Targets - These are our plans and targets for this year.

1. Meet the [Eco Schools Green Flag](#) criteria by the end of the year.
2. Set up The Pledge so every member of the community can make small practical changes.
3. Change pupils behaviour so no-single use plastic bags are brought back for the vill.
4. Reduce single use plastic on site by 80% by the end of the year.
5. Double recycling uptake and facilities across the school.
6. Reduce food waste produced for our plates by 50% (and keep it there).
7. Increase the consumption of local, sustainable and environmental food.
8. Increase student uptake of environmental products and clothing.
9. Reduce paper usage across the school by 50%.
10. Raise awareness and have environmental issues taught in all subjects.

Can you help with any of these?

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For Oceans' Sake

A poem by Olivia Meanley

We have to save generations from plastic,

We need to see a change so drastic.

We have to save the land and the seas,

Because of humanity's selfishness, the earth is
increasing in degrees.

Sea creatures are outnumbered by our waste

The fish we eat will even have a plastic taste,

Sea creatures swallow toxic particles thrown irresponsibly,

Let's try thinking sensibly.

Plastic swamps the canals, rivers, lakes and oceans

Combining like toxic potions.

Bottles, bags, tags and drinking straws,

Fatal pollution and plastic are the cause.

Use less plastic and recycle at home

Or the future of the ocean will be unknown.

Allow the seals, shrimps, sharks to swim free without worry,

We ruined the earth and now we need to fix it, hurry!

Let's take action now, as we prompted the problem,

Otherwise our lives will be oh so solemn.



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Engineering and the Environment by Tom Boddington

Algae and salmon's contribution to a greener Scotland

Scotland is home to many great lochs and a Scottish biotechnology company called **Xanthella** <http://www.xanthella.co.uk>, have been looking at the relationship between salmon and algae to see how they can massively increase the potential of Scottish wind farms and simultaneously make salmon cultures more green!



The company decided to install **16, 1 thousand litre Photo-bioreactors** (these are large reactors in which algae are produced from light) at the Ardnamurchan Estate in West Scotland. These will **grow Algae from a local wind turbine**. This is beneficial for a number of reasons: first that this is now **helping produce algae to feed Salmon stocks in an environmental way**. They will also now power the main grid of Scotland and when the main grid can't have any more electricity pumped into it, **rather than it being wasted, it will now power the Bioreactors**. This is beneficial to the grid as there is less wasted energy and damage, but also for the algae farming as the conditions for growing are more realistic in the bioreactor. Douglas Mckenzie said: "Renewables are being developed in Scotland much faster than we expect. We could generate a super-abundance of electricity but we need to have some sensible use for it because the grid couldn't cope with it."

On top of that, The algae will produce omega-3 fatty acids which can be used to feed salmon. Salmon is one of the biggest exports in Scotland and this will make the industry more eco-friendly and increase the production of it with a smaller carbon footprint and so more locally sourced food will come from Scotland. Whilst using algae for the production of biofuels and bioplastics isn't yet economically viable, it may well be in the near future and this scheme would help tremendously with supply.

What are Photo-bioreactors? (in case you're interested):

These are machines that **cultivate phototrophic organisms from light**, e.g algae. These organisms commonly use CO₂ and light to create their nutrients and this, in turn, benefits the environment as they **reduce CO₂ levels** in areas. The conditions in these machines are very precise. They also re-use nutrient rich, fish waste water, helping **reduce waste**. They generate all sorts of **biomass** which can be used as **fuels for renewable energy**.



Examples of certain types of photobioreactors. Moss cultivator (left) and Tubular bioreactor (right).

Source: professional engineering magazine.

Tom has a passion for combining Engineering with Environmental issues. We'll be featuring more of Tom's articles in future editions.

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How minorities change the world - By Jess Edwards and Emiy Benkert

Minorities are essential to develop change and innovation within a modern society, whether this be culturally, socially or environmentally. Social influence can occur when a minority converts the attitudes, beliefs and behaviours of the majority. Conversion results in attitudes being privately and publicly accepted as the standpoint is internalised which is the deepest form of conformity. For conversion to take place, the minority group must adopt particular behavioural traits involving commitment, consistency and flexibility.

In order to convert the general public's view points of sustainable behaviours, we need to take action and be the minority group. In this way, we can influence the majority to develop these sustainable behaviours and therefore, a broader set of the population can make changes to decrease climate change as a whole. According to psychological research, the behavioural styles of influential minorities can have an important influence in creating productive thinking among majority members.

We need to show commitment by making sacrifices ourselves to show the majority perseverance and confidence at great cost. For example, Cranleigh doing Meat-Free Mondays may inspire people beyond the Cranleigh community to adopt this sustainable behaviour. This will create a network effect due to people influencing their friends and family, therefore a considerable number of people's behaviours may be converted due to the fact that they have been forced to consider different opinions.

Consistency needs to be shown, as it causes the people to reassess their own viewpoints about the topic of sustainable behaviours, and as doubt and uncertainty creep in as the minority persist in their viewpoint despite majority opposition, social pressure and rejection forces the majority to take notice. A consistent minority group is almost eight times more successful than an inconsistent one.



Flexibility shows the majority that they are able to cooperate and be reasonable which is more persuasive than a rigid, narrow-minded group. Using the example of meat free monday at Cranleigh, this is a better and more sustainable way to cut down meat consumption than telling everyone to immediately adopt veganism.

And finally, be persuasive, and possess the ability to put across a message that makes sense to your audience. If an individual within the majority believes that non renewable energy is the way forwards, you can convert this viewpoint by making them internalise and believe in the positive consequences of renewable energy through your persuasive argument. Through time and if successful, the snowball effect will occur - a theory proposed by Van Avermaet - stating that members of the majority will slowly move towards the beliefs of the minority which will pick up members so rapidly that it will grow in size to eventually become the majority.

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Planetary by Bob Edwards

Cranleigh's Environmental Committee is really excited to be developing a co-operation with a fantastic new environmentally focussed company, Planetary International, during its launch phase, as the company is based just across the border in West Sussex. The founder, Bob Edwards, is the father of two OC's, Ollie (2012) and Nick (2014) and his daughter, Jess, is currently in the Lower Sixth. Here, Bob explains his big vision for Planetary.

Planetary is a new website that has been structured as an Eco Hub. It aims to educate and empower students in relation to the environment, with learning content, tips, current news, curated articles and links to environmental organisations. The focus of the educational content is on the 17 UN sustainability goals, with its learning content structured to capture the four established learning styles – something for everybody.

As an Eco Hub, Planetary is seeking to provide opportunities for schools to partner with other schools, universities and environmental organisations, both nationally and globally, and is looking to grow its future offering as a pathway to students from academic life to the workplace, through work experience, internships, and purposeful travel opportunities, all as they relate to the natural world.

Planetary and Cranleigh are working with Dr. Chris Sandom, a Director of Wild Business. Chris is also a Senior Lecturer at the University of Sussex doing teaching and research on rewilding and we are looking into the possibility of rewilding part of the Cranleigh campus. We are also discussing the establishment of environmental workshops to be held at Cranleigh, together with local schools, leading to a Surrey/Sussex schools Eco Conference in Q1 2021. The intention is that such workshops and conferences will be moderated by environmental and ecological experts such as Chris so that local joined up thinking and collaborative projects will result from

this association.

Planetary is also looking to involve local businesses with green aspirations, all such developments to be featured on the Planetary site as a model for the rest of the U.K.



Look out for more from Planetary in the future.

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The Lowdown

The Lowdown is a chance to go over everything that has happened this term. It has been particularly busy, with the introduction of Meat Free Monday, the Eco-clothes sale and the start of The Pledge.

Meat Free Monday

Meat Free Monday was implemented to help us lower our meat intake as a school. Livestock farming contributes 18% of human produced greenhouse gas



emissions worldwide¹ and 80% of all agricultural land being used for livestock pasture., so we wanted to

help reduce these figures. Thanks to the amazing recipes of head chef John Smith, we enjoyed some great meals from chickpea curries to veggie burgers.



The Pledge

Being stuck indoors is the perfect time to start focussing on living greener. Here's a few ideas from The Pledge that you could incorporate into your lockdown life.

- Always print double sided and avoid printing altogether unless needed (easily done when distance learning).
- Only take the food I want at meals, don't waste food (especially important with the supermarket dilemmas).
- Write an article, make art or do something unthought of to be featured in the next eco-blog (also helps curb boredom during lockdown).
- Don't waste water - turn that tap off
- Turn off lights when I'm not in that room, or when the sun is (hopefully) shining!

¹ <http://theconversation.com/five-ways-the-meat-on-your-plate-is-killing-the-planet-76128>

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Second-Hand Clothes Sale



The clothes sale was a huge success this term thanks to all of your generosity. We had no idea how many clothes would be donated, so a huge thank you must be given to all of the people who donated clothes, whether that was one pair of jeans or 3 huge bags of clothes, everyone's contribution was amazing.



The sale was great and everyone came away with lots of fresh garms (as you can see by Will O'Connell's sustainable and funky look).

After calculating the original clothes sale, the flash sale and profits from Bella's amazing green depop, we have made around **£1800**. This money and the money made from the mufti day will be split between: Land Port Macquarie Koala Hospital, WWF Bushfire Relief; The World Land Trust (David Attenborough's charity); Surrey Wildlife Trust and Behind the Label, a charity that fights child slavery in the fashion industry.

As a committee we owe you all a huge thank you for helping achieve this amazing number and for making the sale so successful.



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The Long Read - Meadow Place Like Home.

Are you stuck at home? (Yes.) Is the sun out? (Yes...hopefully.) Do you want something to do over Easter that doesn't involve leaving home and will help your garden and the pollinators it relies on? (Of course you do.) Now that it's spring again and the world is waking up, people inevitably start to think about their garden and spend their Sundays at Notcutts replenishing their borders and looking ahead to a colourful garden full of life. Well, the Notcutts part of this might be a bit scuppered for now but there is no reason why we can't dedicate some of our garden to a wildflower meadow that will look lovely, require less maintenance once set up and, crucially, provide food for [struggling pollinators](#) to whom, endless mowed lawns are a nutritional and biodiversity wasteland. As such, we thought we'd talk to friend of The Cranleigh Environmental Action Group, Dr Chris Sandom, who we met through our developing association with Planetary - the fantastic initiative being set up by Bob Edwards - Jess' father. Dr Chris is [Senior Lecturer](#) in Biology at the University of Sussex, specialising in restoration ecology and rewilding.

From Dr Chris' profile: *"I am particularly interested in the role large mammals can play in restoring and maintaining biodiversity and ecosystem services. I see rewilding as part of the sustainability agenda in conservation where short-term interventions are used to minimise the need for perpetual human management of nature. As a result, I am particularly interested in understanding when animals can be reintroduced to help meet restoration objectives (known as Trophic Rewilding). I am also a Director of [Wild Business](#), a business that seeks to help businesses restore nature and benefit from doing so. I am also Chairman of Rewilding Sussex, a community group seeking to engage young people in the future of the Sussex landscape."*



We spoke to Dr Chris and asked him about the process of rewilding and what we can do in our own homes to attract back the wildflowers and the bees...



Above: Dr Chris at work! (Yes that's a real boar!) Right: Dr Chris' wild patch at home.

What is rewilding all about?

The key idea of rewilding is to let nature take its course and surprise us. It is normally applied to big landscapes, but the ideas can be applied almost anywhere albeit with some compromises. This ethos of accepting uncertainty is attractive to many - rewilding practitioners love the unexpected, the most exciting stories from the [Knepp wildlands project](#) is the unexpected flourishing of turtle dove, nightingale and purple emperor butterflies. But nature doing its own thing is not a tidy process and often looks what some people will describe as messy. But 'messy' landscapes are rich in wildlife, and so have their own beauty.

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Why is rewilding in our own gardens so important?

We've lost our connection to nature. We've forgotten it is a system of stunning complexity, with plants and animals all interacting to give it a life of its own. A stark example of this at the moment is the rush to plant millions of trees, it seems that we've forgotten that nature can plant trees without the need for people to do it. It isn't always the case, but we really should be looking to let nature plant trees for us where we can. Rewilding our gardens could be a fantastic step to helping us reconnect with nature.

What are the key issues with our gardens and urban green spaces at the moment?

Nature works best in big and well connected spaces, with a really diverse system of plants, animals, and microbes interacting with each other. When we build cities we fragment the landscape with fences, buildings, and roads, blocking off nature's connectedness. We pave and put down artificial grass covering over the soil. On the green space that remains, pesticides create hostile environments for all sorts of life. Our pets mean predator density is also really high creating problems for birds and small mammals. All in all, this doesn't give nature much of a chance to thrive.



What does your ideal view of our gardens look like?

My ideal view of a garden is a diverse place. It has space for family and friends, space for my kids to play, but also has space for a little bit of wild nature to thrive and change on its own terms. Many would see it as a mess, but I see it as a place to explore with my kids and connect with the many faces of nature. (On the left is Dr Chris' son, Leo, checking out a slow worm his patch attracted.)

Do we have to tear up our lawns to achieve this? Does it involve loads of work?

It doesn't have to. There are lots of different ways to get rewilding started, and those different ways will influence the path your wild garden takes. You can just stop doing whatever you were doing before and see what happens over the weeks, months, and years. You could remove turf and top soil to get rid of some of the past human influences. You could do that and add some seeds that might be missing from the seed bed. You can do any or none of these things. Rewilding is really about learning to sit back and watch what happens.

If we could only plant ONE plant to help attract pollinators, what would it be?

No idea. In nature, diversity is the key. If you read about rewilding or regenerative agriculture the message is the same, you want diversity. So don't select one species to plant, seed a bunch of species that are likely to have been excluded in the past and give them a shot at returning to thrive in your patch.

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Can you give us some tips for rewilding / no-mow / attracting more wildlife into our gardens?

The practice of rewilding is typically broken down into two approaches: active and passive. 'No-mow' being passive, just step back and let nature go right from the start. Active is top-soil removal, restoring a seed source and then letting nature go (the aim is always to be passive eventually). Whether you choose active or passive depends on what you're willing to accept as outcomes. No-mow will mean long grass with low diversity is very likely, especially in the short term. As the years go by things might change though. The more you invest in active approaches at the start will increase the chances of a more diverse outcome being achieved faster.

Think about how nature works. Nature is the interaction of different plants and animals. These interactions are different in different places and at different times. There is plenty of chance involved in these encounters. Some animals graze, some browse, and some root. They do these at different times of the year, e.g. wild boar spend most of their time rooting in the autumn and winter, and graze in the spring and summer. So if you can't get any wild boar back into your garden (and most won't) then think like a wild boar and mimic a bit of random rooting in the autumn and winter and grazing in the spring and summer. This disturbance will stop some plants dominating and will make your garden more diverse. When rewilding at small scales, you need to rewild yourself as well. And I do mean be random about this, set up some options and roll some dice to dictate what you do, when. Unconventional I know, but might mix your gardening up a bit!



If you're interested in finding out how Britain's landscape and megafauna has changed over the years check out a graphic short story about it [here](#).

In terms of specific gardening tips, I'm going to hand over to my friends to help. First of all, check out Fran Southgate's (Sussex Wildlife Trust) 12 tips for wildlife helpful here:

<https://sussexwildlifetrust.org.uk/news/if-you-only-do-twelve-things-for-wildlife>

Fran and I collaborate a lot and she gives great practical advice.

For step by step advice, check out this from Trevor Dines on how to grow your own wildflower meadow:

https://plantlife.love-wildflowers.org.uk/wildflower_garden/how_to_grow_a_wildflower_meadow/

(Editor's tip: You can order wildflower seeds on-line. Make sure they are native meadow-flowers and are appropriate for your soil.)

Thanks so much to Dr Chris and his family for giving up their time to speak to us and allowing us to use their lovely photos. Thanks also to Bob from Planetary for making the connections - check out his article above. Please send us your photos of your own Wildlife Gardens and we will feature them in future editions! Happy Gardening!

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The Last Word...

It is difficult to think about the outside planet when we are all stuck indoors but here's a fantastic article that gives you **50 great tips and guidance on living Eco at home.**

<https://www.theguardian.com/environment/2020/feb/29/50-ways-to-green-up-your-life-save-the-planet>

Drink tea, build a wildflower meadow, FaceTime your friends and Grannies, recycle and try to keep busy.

Maddy and the team.

