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GUILDFORD ENVIRONMENTAL FORUM

newsletter

December - February 2020/21

The Guildford Environmental Forum AGM 2020

A write up by Adrian Thompson

Adrian Thompson Chair of GEF opened the 2020 AGM of the Guildford Environmental Forum (GEF) by welcoming some 35 GEF members and guests via a Zoom link. The minutes of the last AGM were published in the June 2019 newsletter and were approved. Adrian advised that Ruth Bolton, GEF's new Communications Officer, would e-mail the slides to all GEF members, together with other links to websites.

Adrian commented that about 100 new members had joined GEF since the last AGM. He therefore, briefly set some historical context. GEF was formed in 1993 after the Earth Summit in 1992. It grew steadily under Peter Slade and John Bannister and, over

10 years ago, GEF signed a Service Level Agreement with Guildford Borough Council (GBC).

Soon after that climate deniers, led by the fossil fuel industry, managed to divert attention away from the Climate Crisis. Partly due to this, GEF membership suffered a fall from 175 members in 2010 to 140 in 2015.

It was not until July 2019 that GBC joined over 200 other Councils in declaring a Climate Emergency. At last there was the political will again, here in Guildford, to act on the Earth Summit agreement reached over 25 years ago....

This short history of GEF is set against the accepted longer term backdrop that geologists are calling the **Anthropocene**.

Colin Summerhayes of GEF's Climate Group (CCG) summarised this as follows: Current investigations make clear that there was a significant departure from the prior level of human impacts at around 1950, with the post-war introduction of consumer-oriented industrial output.

The combination of rapid consumer oriented industrial growth with rapid population growth post WW-II has meant that **more than 85% of all fossil fuels ever burned have been burned since 1950.**

Humans now affect 75% of the planetary land surface, the other 25% being mainly desert or ice. It makes no sense to treat diminishing biodiversity or climate change or waves of viruses derived from animal-human interactions as single issue campaign topics. Everything truly is connected.

The increase in global warming and the decline in biodiversity are linked and tied to growing human influence, as is the increase in viral epidemics. Of course all these things are in some way tied to population growth and also to current neoclassical economic models that regard the environment as valueless.

Our negative human impacts include:

- **land clearance (e.g. for crops like soy beans and for cattle feed);**
- **the growth of monocultures (e.g. for palm oil);**
- **supertrawling to deplete the ocean's fish stocks; tropical forest decline (e.g. clearing mangroves for shrimp farms);**
- **the transboundary transport of land plants and animals;**
- **excess fertiliser usage creating oceanic dead zones;**
- **plastic garbage patches;**
- **and, of course global warming driven by**

fossil fuel burning, which is causing plants and animals to migrate polewards.

At present sea level rise is tiny, but it will eventually come to be a significant by-product of global warming.

Turning the situation around requires focus on

- (i) **cutting energy use;**
- (ii) **moving to a renewable energy economy and infrastructure;**
- (iii) **eating less meat;**
- (iv) **planting more trees as an integral component of rewilding**

Key achievements of GEF since May 2019 (since the last AGM)

A. The Climate Crisis Group or CCG meets monthly and is chaired by Richard Waters.

Pre-COVID, the CCG had organised 22 presentations to Parish Councils, Community Groups and Residents' Associations (Parish Councils for simplicity) to raise awareness of the Climate Emergency.

The format was that the CCG agreed the dates, prepared the promotional material and organised the presentations by GEF's brilliant presenter, Henrietta Stock.

About 4 key members of the CCG were also present to answer questions. The Parish Councils paid for the hall hire and promoted the talks locally. 9 presentations were made before the Covid pandemic caused the remaining 13 to be postponed. All presentations were successful, to varying degrees, with a total of 350 attending. So far GEF has gained some 25 new members from this initiative but has further to go in raising its profile.

During the year GEF has been represented on the GBC Climate Board, but little significant new progress had been made since the March 2020 lockdown, except for the appointment by GBC of a Climate Change Officer, Paul Taylor-Armstrong.

During the year, sponsored by the University

of Surrey's Living Labs project, GEF took on a placement student, who has produced a dissertation entitled "The impact of COVID concerning perceived risks towards Climate Change. A case study of GEF".

B. The Biodiversity Group had also been extremely busy, as reported in the June and September newsletters. Grants totalling £16,300 have been secured from the Community Foundation for Surrey (£10k) and Guildford Borough Council (£6.3k). GEF is hugely indebted to both donors and to Helen Harris, Clare Millington and their team, who are working very hard to complete the building of a new Hub at the Rosamund Community Garden before Spring 2021.

C. The growth in new members has meant that, happily, GEF has had an influx of volunteers taking on key roles. This will mean that GEF will be well-placed to make a greater impact once Covid-19 ceases to dominate our lives.

Membership.

Adrian advised that since May 2017, membership had nearly doubled and the numbers have continued to improve, despite Covid. Total membership in November 2020 had now reached 280.

Finance.

The accounts showed that income had risen and expenses rather less, giving a small surplus for the year. This was despite an increased investment in marketing expenses of £577. The surplus includes £665 which will be spent on the Swift project in the next 6 months and £500 income for the Rosamund, Community Garden, which will be spent over the next year. The continued increase in membership and gift aid income meant that GEF expects to break even in the current year despite the outflows on these restricted funds. Adrian reported that the Balance Sheet showed healthy reserves that equate to 1 year's current expenditure. Adrian commented that GEF is weathering the Covid crisis, financially.

Impact of COVID-19 on GEF.

Adrian reported that the postponement of the 13 talks to parish councils had been a big disappointment. Apart from losing the vital opportunity of raising awareness of the Climate Emergency to these important groups across the Borough, Adrian estimated that GEF would have added some 50 more members from those excellent presentations by Henrietta. Hopefully they will all be held next year, perhaps virtually.

On the positive side, the extra time created by lockdown had enabled GEF to move forward as regards its structure as follows, so as to be better placed for the future:

New officers have been appointed to the following roles (further details can be seen in the last newsletter).

- Ellie Morgan has taken over as Newsletter editor from Clare Windsor on her retirement after 17 years in that role. Huge thanks are due to Clare for making the excellent newsletter the centrepiece of our information to the Community and to Ellie for maintaining and enhancing that high standard.
- Helen Harris has taken on the new role of Chair of Biodiversity and the Rosamund garden.
- Richard Waters has taken over from Adrian as Chair of the Climate Group (CCG).
- Ruth Bolton has taken over from Matthew Ambrose as Communications Officer. Matthew had developed the Communications role so well over the Summer before leaving for Bristol to complete his Masters in Climate Change.
- Charlie Meakin has taken on the new role of Events Officer, successfully arranging the Modern Nuclear talk and this AGM.
- Caroline Scott has taken over from John Bannister as Leader on Waste and Recycling. Caroline has already met with Chris Wheeler, GBC's Waste, Parking and Fleet manager and is developing various follow-up initiatives. She also made a presentation on Sustainable Transport at a recent well-attended event organised by Greenpeace. Other initiatives that Caroline has developed include getting 3 local schools to participate in Clean Air Day on 8th October.
- Laura Bruder is about to take on the role of Membership Secretary from Adrian. It was announced in Sept that Allen Johnson would take this on, but in the end, he did not have the time and Laura has stepped forward.

Adrian thanked every one of the new officers for taking on these roles and for all the hard work and commitment that they have put in. He commented that GEF could not progress without them.

New structure

GEF members appoint the Executive Committee. The Exec meets about 4 times a year to oversee membership, finances and the strategic direction of GEF. The new Chairs of Biodiversity and Climate (Helen and Richard) bring proposals to the Exec, where expenditure is involved.

- Adrian commented that when he joined GEF some 10 years ago, he inherited an excellent XL database that held all GEF's membership details. This has served GEF well, but David Stokes (Chair of the Holy Trinity Action Group or HTAG) recommended software called Membermojo, which HTAG use. Thanks to some great work by Ruth Bolton over the last 3 months all the GEF records had been transferred to Membermojo and this will soon take over from the old database. More details will be made available as soon as the transfer is finalised, but it should give members several advantages, including the ability to update their personal details and e-mail address on-line and automating our mailing lists.

- The growth of GEF had also meant that we can apply to the Charity Commission to become a CIO. We await a final decision as to whether this will proceed.
- The Climate Emergency Centre, Guildford. The problems of retailing in the centre of Guildford, exacerbated by Covid-19 have led to many premises becoming empty in the High Street. GEF is supporting a Community initiative, which is planning to lease, on attractive terms, some empty space in the town centre. The aim is to take the challenge of the Climate Emergency to Guildford residents. The public will probably be attracted by a café and repair shop plus many events and promotions. A full-time manager is likely to be employed. However, once Covid allows, there could well be opportunities for GEF members to become involved in a variety of ways.
- Richard Waters has also led a small team who are developing the GEF website in an updated format.

Looking Forward.

It is difficult to plan ahead until Covid-19 is under control. However, an outline of the key future priorities over the coming year include the following:

- To complete the Rosamund Community Garden Hub by Spring 2021 and continue to develop the Garden and the Biodiversity team.
- To complete the presentations by Henrietta Stock to Parish Councils across the Borough.
- For the Climate Crisis Group to work closely with Guildford Borough Council and for GEF to liaise more with the Guildford Society, churches and schools to develop awareness of the Climate Emergency.
- To support the opening and running of the Climate Emergency Centre in Guildford.
- To work with the University of Surrey to arrange for another placement student to carry out further research to improve our communications with Guildford residents.
- To seek to increase membership towards 500 by the end of 2021. All GEF members can help by renewing membership next April and please also encourage friends, relatives and other contacts to support GEF.
- To continue to develop the Swift and Small Blue butterfly projects and monitor their success. The last two newsletters have covered the superb work of John Bannister, Sarah Davis and many volunteers on these projects.
- Administratively, to launch the membermojo membership software.
- To become a CIO and approve a new Constitution.
- To develop GEF's structure so that younger members can more easily lead GEF into the future.

Adrian thanked all GEF's wonderful volunteers and especially all committee members who already work so hard for GEF by running events and supporting the Rosamund Community Garden. He reminded everyone that, just by being members, they become Ambassadors for GEF. The next few years are absolutely critical if we are to pass on a sustainable world to future generations. Adrian then presented a slide showing suggestions and opportunities that members can take away and consider. This was e-mailed to GEF members very shortly after the AGM.

Adrian added that he had received no advance notification of anyone wishing to stand for election to the Exec before this evening. As voting was not necessary, it was agreed that the accounts should be adopted and the composition of the Exec as outlined in the last issue of the GEF newsletter, was approved. Adrian commented that he should be contacted if anyone was interested in joining the Exec in the future.

Adrian concluded by sharing some thoughts based on a webinar with Jonathon Porritt that he had recently attended. In this time of uncertainty, he hoped that some key messages would inspire members to spread the word about GEF, to help build the membership and to make Guildford an example of what can be done by collaboration and hard work.

- We are talking about the future of Humankind. Adrian believed that we do still just have time to avoid runaway climate change. Current lifestyles however, especially in the rich world are unsustainable.
- Technological breakthroughs cannot solve all climate challenges. We are much too growth obsessed. Much of the answer lies in reducing consumption.
- The post growth economy must take account of today's poor – those who earn less than \$5 per day.
- Because of Covid and other issues, today's politicians are nowhere near adequately focusing on our climate and loss of biodiversity challenges.
- The super-rich are causing massive over-consumption. This must be tackled, especially in view of unsustainable debt, especially in the UK and the US. The best solution is in taxation – including a wealth tax, tax on carbons and

possibly on financial transactions.~The key to success is focusing now on action to achieve a net zero trajectory by 2030 or earlier. We can all help to ensure that this happens.

Adrian stressed that **it is all too easy to give up**, because the last 25 years since the Rio Summit have been largely wasted, despite great advocates like Jonathon Porritt working tirelessly to change mindsets. So he wanted to **end with some positive thoughts** that he hoped would encourage members **to help change attitudes and make Governments address the issues that have been outlined tonight** very much more urgently.

The positive messages are:

- We will soon know if there is a new president of the USA.. Joe Biden has promised to immediately rejoin the Paris Climate deal. That would be a massive step.
- China had recently committed to net zero climate emissions by 2060. It is the biggest emitter of CO2 (about 28% of global emissions) and seldom overcommits on such issues.
- For 40 years, China has had an ambitious long term policy of planting trees. In the last 40 years it has planted 66 billion trees, in order to tackle desertification and soil loss. This is playing a significant role in tempering its climate impacts. An international team has identified two areas in the country where the scale of carbon dioxide absorption by new forests has been underestimated. Taken together, these areas account for a little over 35% of China's entire land carbon "sink".
- Since China's 2060 net zero announcement, both Japan and South Korea (major industrial countries) have committed to net zero by 2050.
- There is good news on the issue of intermittent wind and solar power. Battery storage is getting cheaper. Elon Musk of Tesla believes that batteries will soon store 5 times current capacity for half the price. This could be a game-changer. Elon Musk has a record of rapid achievement. Tesla was now worth 5 times the market capitalization of Ford and General Motors combined.
- We can afford to tackle the Climate Challenge. Covid measures (not forecast a year ago) will cost the world \$14 trillion. Jonathon Porritt stated in the webinar that only 10% of that sum would tackle the

entire Climate Emergency and the loss of biodiversity. What we need is the political will.

- the Proximity Principle – more people will realise the challenge the more they are affected. This was seen in 2020 in California and Australia as a result of the huge forest fires there.
- We may, at last, have learnt to respect scientific advice as a result of Covid 19. There is clear evidence that countries such as the US and Brazil that have not followed scientific advice have seen the most damage to their economies as well as the highest death rates.
- Future investment in building more planes, the Heathrow airport expansion, and the £27bn promised for new roads do not look like sound investments, as argued in our last two newsletters. In the UK, it is only a year until the Glasgow COP26. This might lead to a much-needed focus on the Climate Emergency by our politicians.
- Young people are more concerned about the terrible climate headlines such as those in the US and Australia. 2020 had been a difficult year for Climate activists. Adrian was confident that they would bounce back.
- Now is the best chance for years to create a Green Economy. Handled correctly, this could create new jobs, especially through renewable energy investment such as solar and wind farms and insulating homes better. All of these can have short pay back periods.

In conclusion, the challenge presented by the loss of Biodiversity and the Climate Emergency is immense. There is still just time to avoid runaway Climate Change if we act urgently now. Adrian hoped that members would spread the word about GEF and sustainability, so that Guildford can become an example of what can be done by working together locally with a common purpose.

Michael Tanner's Poetry anthology - Elemental published by Palewell Press - by Ellie Morgan

Regular contributor to this newsletter, Michael Tanner, has provided us with poems and articles for many years. Now a collection of his poems, inspired by the environment – mainly the rural Environment, have now been published in an Anthology by- Palewell Press.

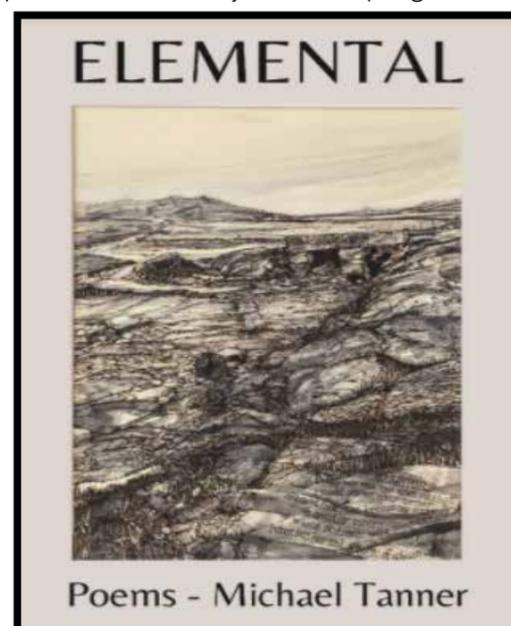
Michael was first approached by the Richmond based publisher after a senior editor heard him reading his work at a London poetry recital. What started as a request to read more of his poems lead ultimately to the compiling of a whole collection.

The Anthology, titled Elemental, consists of 50 poems drawn from the writer's experience of walking through the beautiful rural landscapes of the chalk hillsides local to Guildford and the dramatic Granite landscape of North West Cornwall.

Two years on from that initial poetry recital, Elemental was launched over Zoom at the end of July and the printers had the first print run early in September.

The Collection has been well received and was included in the published long list this year of the Erbacce international poetry competition, competing against 9000 submissions from all round the globe.

I'd like to offer my congratulations to Michael on this fantastic achievement and if you'd like to get your hands on a copy the anthology is on sale at a number of leading book shops.



Peak laundry and the climate emergency

by Caroline Scott

It wasn't so long ago that people hand-washed clothes, and used a mangle to ring them out. Washing machines only began to appear in households during the 1960s. Drying was either in the open air, or put near a fireplace (central heating was not widespread until the late 1970s). Washing clothes was time-consuming and labour intensive, and naturally meant that clothes weren't washed as often as today. While the washing machine liberated 50s and 60s women from a domestic chore and saves us all time, frequent laundering is taking its toll on the environment.

The past 70 years have seen a massive change in the materials used for clothing, our consumption habits, and a garment's lifespan. In the first part of the 20th century, winter clothing staples were mostly woollen and would only be washed occasionally, and spot cleaned in between. People owned fewer clothes and looked after them. Since the 1960s, textile waste has increased a staggering 811% and is often made from plastic.

With more clothes in our wardrobes – and easily washed synthetics, the average household use



Images provided by Caroline Scott

has risen to 4-5 washing cycles a week – with each one using around 50 litres of water. To put that in perspective, that's the same amount as the WHO's suggested daily minimum for basic sanitary, bathing, cooking, clothes-washing and drinking needs. In Britain, the average per person is three times that amount – 150 litres a day. Also problematic is the high consumption of energy used for washing and drying clothes. Most of the energy of a laundry load is used up in heating the water (90%) – hence the environmental campaigns to encourage washing at 30C. And tumble dryers are even more energy hungry. Certainly for city living in small spaces and no outdoor space, a dryer is a solution, but unfortunately not a climate solution.

With the trend in city living continuing, the issue of where to dry clothes isn't going away. While sunnier countries often have roof terraces where residents can hang washing out, this is not the case in Britain. Given the climate, perhaps a covered roof terrace could be part of a solution to urban laundry needs, or a drying room which uses dehumidification and air circulation to dry clothes. Such methods would



also save clothes from wear and tear caused by a tumble dryer, but could also have a positive social impact. It's not uncommon for people not to know their neighbours, and communal areas in apartment blocks could foster better relationships in society.

The climate emergency requires us all to start using water and electricity more carefully. Reducing the number of laundry loads seems like a good place to start, and in the meantime, for those with no space to hang clothes out, perhaps a clothes pulley is the way forward.

Alex Clifford tells us about his first place win in the Individual House category in the Guildford Design Awards 2020.

In 2007, my wife and I purchased a 1950's bungalow with the intention of extending it to be a suitably sized family home before our children hit double figures. With a background in design and project management I decided to design and build the house. Our plans evolved over a number of years as we saved for the works. We eventually decided to knock down and rebuild rather than extend, as the existing house was of such poor quality and would have left the house very compromised in terms of both layout and insulation levels. As we were going to be building from scratch we wanted to build a super insulated low energy house. We aimed to build the best house that we could afford rather than the largest, which would sit sympathetically in the landscape. The house has traditional roof forms tiled in hand finished clay tiles, with all of the exterior timber clad in UK grown thermo treated Ash.

After researching various methods of designing and building low energy homes, I decided to use Passive House principals as they are well established and popular with self-builders.

The Passivhaus standard originated in Germany in 1996 and was developed by the Passivhaus Institut (PHI).

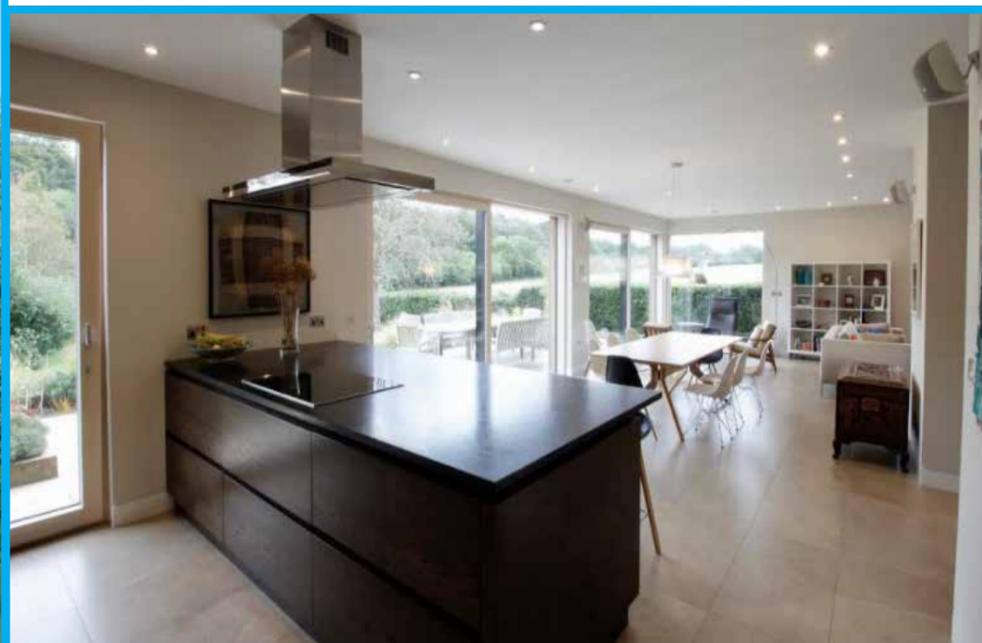
A Passive House uses a fabric first building approach. They are super insulated and air-tight requiring only a minimal amount of heating. Careful detailing is used in their design to eliminate thermal bridging which allows heat to transfer directly through building junctions or gaps in insulation. Heat loss through draughts is minimised by the air tightness. Fresh air is supplied to individual rooms in the house through a MVHR (Mechanical Ventilation & Heat Recovery) system, transferring heat energy from the warm, damp stale air extracted from kitchens and bathrooms.



Pictures taken by Alex Clifford

Guildford Design Awards 2020. Winner Individual House category for a Passive House self-build project.

Having lived in our Passive house for 3 years, the benefits to us have become clear and we would not choose to live in an older or even current (building regs standard) house again. Passive and low energy housing is often promoted as a way to reduce



energy bills, which of course is true and will become increasingly relevant as energy prices increase, but they also bring far more benefits to homeowners making them extremely comfortable environments to live in.

Benefits include:

- Even temperature throughout all rooms in the house with no draughts
- Warm in winter, cool in summer
- All of the space in a room (including next to full height windows) can be utilised even in the middle of winter.
- Very low energy bills - our annual space and water heating bills have been just over £200. During the summer months most of the hot water is heated from an electric immersion heater that is fed from excess solar P.V. generation so it is essentially free.
- Fresh filtered air that is replaced constantly throughout the house every few hours - We use a pollen filter in the spring and summer which helps reduce allergies such as hayfever.
- No condensation or dampness even in the bathrooms - the indoor humidity is a fairly constant 40%-50% due to the MVHR system.
- Energy is not wasted through draughts and ventilation, but recovered through the MVHR.
- Clothes dry in a couple of hours, tumble dryer no longer needed.
- Very quiet due to thick walls and triple glazing

Read more at Alex's blog - www.passivehouseselfbuild.co.uk

Introduction – ‘A vision for a greener future’

Environment Bill 2019-2021 (published on 30 January 2020) is a landmark bill that aims to contribute to the Government’s stated objective of being “the first generation to leave the natural environment in a better state than it inherited it” and its manifesto pledge to “protect and restore our natural environment after leaving the EU”.

This bill is the re-introduction of the Environment Bill 2019, which fell at dissolution of the Parliament for the General Election 2019.

The Environment Bill comes in two thematic halves:

1. A legal framework for environmental governance.
2. A set of measures to improve the environment across a range of policy areas

The Bill also puts the Government’s 25 Year Environment Plan on a statutory footing.

A legal framework for environmental governance - Bridging the Governance Gap

About 80% of UK environmental legislation derives from the EU and EU institutions play an important role on monitoring and enforcing their implementation. The Court of Justice of the European (CJEU) Union interprets EU law to ensure consistent application across the EU and makes judgments about whether a Member State has complied with EU environmental law. If found to

be at fault, member states must put things right or risk being fined. The European Commission has the oversight on implementation of EU environmental law and can refer member states to the CJEU where necessary. EU citizens can petition the European Parliament where the application of EU law affect them directly. The European Environment Agency is responsible for providing independent information on the environment including on the implementation of the EU’s environmental action programmes across the EU.

The Environment Bill sets out the new domestic framework for environmental governance and seeks to ensure that there will be no governance gaps once the transition period comes to its end.

The new domestic framework consists of three key elements:

Environmental Principles

EU environmental law and policy is based on four core environmental principles contained in the Treaty on the

The Environment Bill – Protecting the Environment after Leaving the EU - by Sunethra Mendis



Functioning of the European Union which is one of two treaties forming the constitutional basis of the European Union:

The precautionary principle helps to manage risk in cases of scientific uncertainty by allowing regulatory action to be taken even if a risk has not been established with full certainty. Such action has to be non-discriminatory and proportionate, and must be reviewed once more scientific information is available.

The prevention principle aims to prevent environmental damage rather than to react to it afterwards. It is applied when the risk of harm to the environment is clear.

The rectification at source principle seeks to prevent pollution at its source rather than in the wider environment.

The polluter pays principle requires polluters to bear the financial cost of their actions.

These principles underpin the development of policy and legislation by the EU institutions, requiring the EU to ensure that its environment policy incorporates consideration of these throughout the policy and law-making process. Integrating environmental concerns into

other EU policy areas has become an important concept in European policy making. These principles have also been used by domestic courts to interpret and apply EU environmental law.

The Environment Bill identifies the principles of precaution, prevention and rectifying pollution at source, and the polluter pays’ principle together with the principle that environmental protection should be integrated into the making of policies, as relevant environmental principles.

The Secretary of State for the Environment has to prepare and publish a policy statement on environmental principles explaining how these principles should be interpreted and applied by Ministers during policymaking. The ministers need to ‘have due regard to the policy statement on environmental principles’ when making policy. Policies relating to the armed forces, defence, national security, taxation, spending or the allocation of resources within government, however, are excluded from the requirement to ‘have due regard’.

Environmental Targets

The Environment Bill gives power for the Secretary of State to set long-term targets. It also makes a number of new provisions including requirement for the government:

- to meet long-term targets, and to prepare remedial plans where long-term targets are not met,
- to set at least one long-term target on air quality, water, biodiversity, and resource efficiency and waste reduction by October 2022,
- to set and meet an air quality target for fine particulate matter in ambient air (PM2.5);
- to have an Environmental Improvement Plan that sets out the steps the government intends to take to improve the natural environment and interim targets towards meeting the long-term targets, and to produce an annual report on it
- to publish a report on the impact of all new environmental primary legislation; and
- to undertake a report on environmental legislation across the world on a two-yearly basis.

The targets set under the Bill will be legally-binding, and the Secretary of State will need to review these by 31st January 2023, and then on a five-yearly basis.

Office for Environmental Protection (OEP)

The Environment Bill seeks to replace the oversight and enforcement functions we have under EU legislation

with effective domestic provisions through setting up the Office for Environmental Protection (OEP) as a new watchdog.

The OEP’s key duty is to hold government to account on environmental law and on the progress of its Environmental Improvement Plan (The 25 Year Environment Plan will be adopted as the first EIP). The OEP has a duty to act independently and impartially and to monitor and report to Parliament annually on the Government’s progress towards the 25 Year Environment Plan and on meeting environmental targets set under the Bill. The Secretary of State must respond to the OEP’s report within 12 months. The OEP also has a duty to monitor the implementation of environmental law and it may report to Parliament and advise ministers on these matters. The Bill require the Secretary of State to respond within 3 months.

The OEP also has the powers to take enforcement action on failures of public authorities (i.e. Government ministers, national regulators and local authorities) to comply with environmental law. The OEP can initiate investigations into breaches of environmental law by public authorities and can also act on complaints made by the public regarding alleged breaches. OEP’s enforcement powers include Environmental review in the High Court (In October, the government tabled a new clause to change it from the Upper Tribunal to the High Court) and Judicial review.

The independence of the OEP is a key requirement. OEP Chair will be appointed by the Secretary of State but any guidance issued by the Secretary of State will be subject to scrutiny of the Parliament. The OEP will have an indicative multi-annual 5-year budget that will be ring-fenced within any given spending review period.

The territorial jurisdiction of the new governance arrangements

As the environment is generally a devolved matter, the OEP will only be able to investigate and enforce potential breaches of environmental law within England. However, the Bill has an option to allow the OEP to exercise its functions in Northern Ireland (This is subject to the approval of a restored Northern Ireland Assembly). It also allows making separate provision for Environmental Improvement Plans and environmental principles in Northern Ireland.

The Scottish and Welsh governments are setting out their own separate arrangements for environmental governance in their nations. UK Government or public bodies exercising reserved functions in Scotland and Wales can, however, trigger the remit of the OEP.

Measures to improve the environment

The remainder of the Bill sets out provisions to improve the environment and focuses on the four priority areas (Waste, Air Quality, Water and Nature & Biodiversity):

Waste and Resource Efficiency

The Bill includes a number of provisions to enable the move to a more circular economy (including measures to transpose the EU Circular Economy Package into domestic legislation) and to give powers to enact initiatives set out in the national resources and waste strategy. It sets out provisions for the managing of waste and producer responsibility including an extended producer responsibility scheme, the power to regulate for eco-design standards and resource efficiency information, amendments to the responsibilities and powers for separating and recycling waste and a framework for a deposit return scheme. The Bill also gives power to regulate imports export or transit of waste and hazardous waste.

Air Quality and Environmental Recall

Local Air Quality Management Frameworks are amended to strengthen the requirements in respect of the National Air Quality Strategy. The Bill also provides local authorities with greater powers in Smoke Control Areas and enable greater cooperation across public bodies on Local Air Quality Action Plans. It also allows mandatory recall of vehicles and equipment on environmental grounds.

Water

The Bill makes wide ranging provisions for water resources management. These include a statutory duty

for water companies to develop long-term drainage and sewerage management plans, provisions to modify Ofwat's licensing process, amendments to when water abstraction licences can be varied or revoked without compensation, powers to amend requirements relating to the chemical status of water bodies, powers to amend the land valuation process for internal drainage board (IDB) charges and power to create new or expanded IDBs where there is a local appetite.

Nature and Biodiversity

An important provision in the Bill is the creation of a new biodiversity net gain requirement in England through the planning system. A 10% minimum net gain will be mandatory and need to be maintained for at least 30 years. It will be measured using a biodiversity metric set out by Defra. Furthermore, the Bill strengthens the duty on public bodies to conserve and enhance biodiversity, requires the creation of Local Nature Recovery Strategies and requires local authorities to consult local residents prior to the felling of street trees.

Conservation Covenants

The Bill introduces voluntary legally binding conservation covenants between landowners and "responsible bodies" to conserve the natural or heritage

Miscellaneous and General Provisions

The Bill also legislates to facilitate an effective regulatory transfer of the EU REACH Regulation (regulating the production and use of chemical substances) into the UK. The Secretary of State and devolved authorities will have the powers to amend the REACH Regulation and the REACH Enforcement Regulations and to make future changes.

What next?

The Environment Bill is still making it's long and protracted passage through the parliament. After a gap of over 6 months the Bill was returned to the parliament in October 2020, together with a number of government amendments.

The Government has indicated that the Bill will not become law in time for the end of the transition period on 31 December 2020. Instead, it is expected to receive royal assent in summer 2021. However, an interim Secretariat with limited powers is expected to be in place on 1 January 2021 and to continue until a fully-functioning independent OEP is established once the Bill receive royal assent.

Green NGOs have generally welcomed many aspects of the Bill and acknowledged it as wide-ranging and ambitious. However, many NGOs see it as falling short of the gold standard in its current form. They are particularly concerned about what they argue as the reduced legal status of environmental principles and the resultant reduced level of legal protection (i.e. because under the EU Treaty the principles are set in law and directly binding) and what they see as inadequacy of safeguards to maintain the independence of the OEP (e.g. the SoS's power to appoint the chair and set the budget and also the proposed amendments also include a power for the Secretary of State to issue guidance to the OEP regarding its enforcement policy).

The Greener UK - <https://greeneruk.org/briefings/environment-bill> and the Green Alliance - <https://greenallianceblog.org.uk/?s=environment+bill> websites are a must read for anyone who wants to understand these and other concerns expressed by green NGOs.

New neighbours at Rosamund Community Garden - The December update by Helen Harris

I'm pleased to report that it has been a productive few months at Rosamund Garden. In light of the reimposition of lockdown measures, we have reverted to our volunteer rota and a limit of two gardeners at a time. Before the restrictions came back in we managed a socially distanced apple pressing and produce sale and made some great steps forward in the management of the chalk grassland fields.

Apple pressing day

Our apple pressing day was much smaller than usual and we were sad not to be able to invite the same number of

friends and newcomers alike to join in. However, we did press our apples with good cheer and sold plenty of juice as well as soup, bread, jams, jellies and pickles made with Rosamund produce. Proceeds will be put towards organic seed supplies for 2021.

Botanical survey and Butterfly Conservation

On November 2nd we were very lucky to be visited by Gillian, Ken and Simon, volunteers from Butterfly Conservation along with members of Surrey Botanical Society. They checked the Kidney Vetch scrapes, put into the field a couple of years ago, confirming that Kidney



Brown Hairstreak eggs on Blackthorn and our survey work in action (photos from Butterfly Conservation)

Vetch has successfully taken hold. This plant is the larval hostplant for the endangered Small Blue butterfly, found close by on Pewley Down and sites between Guildford and Box Hill. Conservation efforts have had real success in developing a network of local strongholds for this gorgeous but threatened little butterfly and we hope very much that Rosamund Community Garden will become a part of this programme. A follow up survey will be conducted next summer to try to confirm the presence of Small Blues on the site.

We also found eggs of another threatened butterfly, the Brown Hairstreak, on the young Blackthorn at the field margins. This butterfly likes to lay just one or two eggs that look like miniature sea urchins to over-winter on the junction between new and old growth on the Blackthorn (or sloe) tree. Modern practices of hedge cutting often inadvertently destroy this important habitat and hairstreak eggs along with it. <https://butterfly-conservation.org/butterflies/brown-hairstreak>

At the same time, Gillian, Simon and Ken conducted a botanical survey for us incorporating the fields, their margins and Rosamund Garden. This was the first time that a botanical survey has taken place at the site since 2013. A total of 94 species were recorded and the data have been registered with the Surrey Botanical Society.

This work will form an invaluable baseline against which to track the impact of our work to restore the grassland going forward. Our sincere thanks to the team from Butterfly Conservation for donating their time and expertise.

Promoting biodiversity through grazing

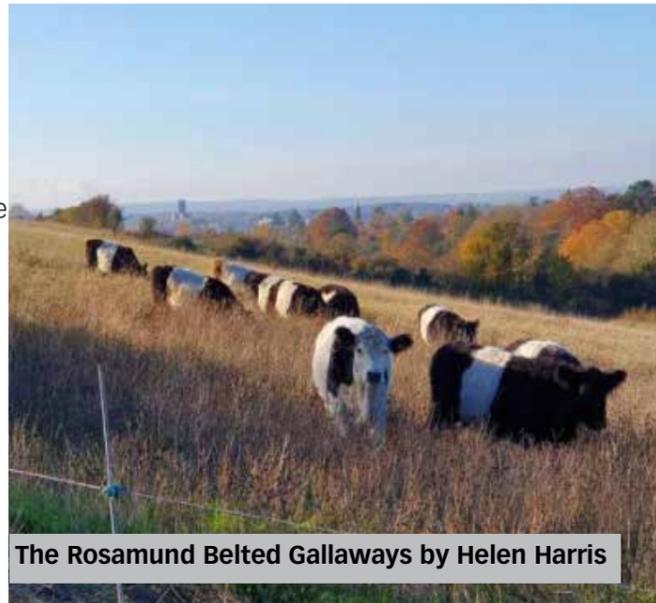
On November 3rd we held a volunteer action day jointly with Surrey Wildlife Trust. A temporary electric fence was erected around the entire perimeter of the 17 acre fields and a good amount of tree popping was done to start to tackle the encroaching hawthorn in the field. Thank you so much to all who came along and worked so hard for that day.

As a result I am very pleased to let you know that we now have 16 resident SWT belted Galloway cattle in the Rosamund fields. Our volunteers have really enjoyed the opportunity to get to know our new lodgers who peer at us with clear and curious eyes from their curly-haired faces as they noisily chew the cud.

The Galloways are providing an important conservation service to us as well as getting a good meal. They are non-selective grazers which means that they tear off great mouthfuls from the tussocks of coarse grass in the field. As they move about

they leave muddy hoof-prints in the ground as well as steaming cow pats. They are helping us to remove the heavy grass thatch that has built up. This reduces the dominance of the coarse grasses, allowing a greater variety of grasses and other grassland plants to thrive. Their hoofprints are micro-habitats for invertebrates and miniature new open territories where seeds buried in the soil can get space to germinate and establish. We have already seen dung beetle larvae happily burrowing in their dung.

Several Rosamund volunteers are now trained cattle lookers, [this is an actual word not a typo!] helping with daily welfare checks. Our Galloways seem happy in their new home and have already made a noticeable difference to the coarse grass in the field in just a few weeks! They should be with us until around Christmas time and we look forward to welcoming them on an annual basis in the autumn season.



The Rosamund Belted Galloways by Helen Harris

WWF Living Planet Report 2020 – bending the curve of biodiversity loss - John Bannister

2018 saw the previous Living Planet Report (LPR), and GEF has followed the progress of these worldwide reports on the state of our global wildlife almost since their inception. The latest report represents the work of hundreds of scientists from 50 countries and it concerns us because we are totally dependent on the rest of the world for food, fibre, water, manufactures, raw materials, waste disposal, etc. Always we have to keep in mind that the economy is a subset of the environment, something politicians find hard to accept. WWF divide the world into five regions and look at the impacts on nature in each one.

The 2020 report shows an average decline of 68% in the populations of mammals, birds, amphibians, reptiles and fish between 1970 and 2016, with the largest individual decline of 94% in the LPI for the tropical sub-regions of the Americas. 75% of the Earth's ice-free land has already been significantly altered and our seas are polluted. Without additional actions to reduce Green House Gases we are on a pathway to a rise of 3 – 4 deg C in Earth's average surface temperature, which will have further devastating effects on wildlife and human well-being. Climate Change is projected to become as, or more important than all the other drivers leading to loss of biodiversity.

First and foremost Land Use Changes stand out at the biggest threat to our wildlife across all regions

accounting for roughly 50% of biodiversity loss. Land Use changes cover the modification to the environment where species live, by complete removal, fragmentation due to roads and other infrastructure and reduction in quality of key habitat. This includes unsustainable agriculture, logging, transportation, residential or commercial development, energy production and mining.

All living species from soil biota to freshwater species are accounted for. The second biggest cause after land use changes is Species Overexploitation, which accounts for about 25% of biodiversity loss. Direct overexploitation refers to unsustainable hunting, poaching or harvesting whether for subsistence or trade. Indirect overexploitation occurs when non-target species are killed unintentionally, for example as bycatch in fisheries. The other threats to biodiversity are in descending order of impact : Invasive species and disease, Pollution and



Climate change (but see above).

In this latest LPR WWF use modeling to see what it would take to halt the decline in all forms of biodiversity from plants to insects to mammals, to freshwater life to soil life, by what they refer to as “bending the curve” of biodiversity loss. The conclusion is that it will take a combination of all the means at our disposal including supply-side efforts, demand-side efforts and conservation efforts. Leave any one of these out and we won't succeed and even then we might get back to where the world was in 2010 by 2100. The report is available on-line at www.panda.org/LPR2020.

A lifeline - volunteering during COVID-19

- By Adrian Thompson

Have you found Nature to be an essential part of adapting to lockdown? I suspect that many readers of this newsletter will find that this strikes a chord. We really enjoyed watching Autumnwatch and other nature programmes and little was more important to us than getting out into the fresh air and close to Nature whenever we could. For many of us, our gardens, however small, were a real tonic.

I spent more hours handling e-mails and attending Zoom and Team meetings than was ideal, so the time that I enjoyed in the fresh air was wonderful. Our lifestyles today do not value the natural world nearly as highly as they should. It should be a priority. I certainly count myself as very fortunate in living at the foot of the dip slopes of the chalk North Downs. We moved here some 18 years ago and this location was a key part of our choice.

Becoming involved with the Small Blue Stepping Stones Butterfly project has been a lifeline during the last year. Living just 4 miles east of Guildford, I was able to walk to my transect sites when time and weather allowed. For those readers who live closer to the centre of Guildford, you have even more choice with the Mount, the [Rosamund Community Garden](https://guildfordcommunitygarden.wordpress.com) (<https://guildfordcommunitygarden.wordpress.com>) or perhaps a short walk to [Pewley Downs](https://interests.me/org/pewleydownvolunteers) (<https://interests.me/org/pewleydownvolunteers>).

I am not sure that we all appreciate how blessed we are in having this wonderful natural resource on our doorstep. Do all our readers, most of whom love nature, know how special the North Downs are? Did you know that there are only 200 chalk streams in the whole world and of those 160 are here in England. Admittedly only

a few are in Surrey, but in Guildford the Sherbourne is a short chalk-fed tributary of the Tillingbourne. There are many more in Dorset, Hampshire, Hertfordshire, Lincolnshire, Yorkshire and Wiltshire.

My father used to tell me how prolific butterflies were on White Down and Ranmore in the 1920s when he was growing up. He would cycle with his three brothers from Hersham to study the butterflies, moths and other insects on White Down. He would never have imagined that 95% of chalk grassland would be lost in the 80 years since 1940. What a tragic loss! We lose the wild flowers and then butterflies and moths and insects decline rapidly as a result.

My enjoyment of the chalk Downs falls into two seasonal halves. In the Summer, (as those of you who enjoyed a talk by Bill Downey about butterfly transects at our AGM in May 2017 ,will recall) we count butterflies and the results are recorded in the UKBMS database. Transect walkers can only count butterflies when it is sunny, over 13C. and not too windy. We try to find a suitable day once a week. In Winter I join work parties (Covid-19 rules permitting) that are making huge strides in managing our chalk habitats so that fast-disappearing species are not lost forever from our neighbouring hills. I chose to join these on a Friday and I would recommend them as a really constructive alternative to most other forms of exercise. To volunteer, the link is <http://eepurl.com/ds7MaP>

Bill Downey found me two transects that I can walk to from our front door. It involves a good stiff walk of about an hour to the Colekitchen transect, completion of the transect in about an hour, a short walk along the North Downs Way to the Hackhurst Down site for the second transect recording and then return. Many walkers concentrate on just one transect. Whenever possible, I include a picnic lunch looking south towards Leith Hill. The Hackhurst site contains a few of the nearly 200 Scrapes (bare chalk areas, often sown with kidney vetch) which provide the ideal habitat for the small blue butterfly. Many other plants and insect species are also benefitting from the management of this vital habitat.



Small copper by Adrian Thompson

Colekitchen is a valuable remnant of open unimproved chalk grassland managed by the Surrey Wildlife Trust (SWT). The surrounding areas of woodland and scrub create a warm, sheltered habitat. The grassland shows typical plant associations of chalk grassland on the North Downs. Small scabious, salad burnet, marjoram and wild basil are common. In areas of shorter grassland, often around the ant hills, smaller plants such as fairy flax, wild thyme, yellow wort and rock rose can be found. Delicate chalkland grasses such as quaking grass and yellow oat grass also grow on the site. The rich flora supports a wide variety of butterfly species including chalkhill blue, small heath, brimstone, gatekeeper and marbled white. There are also many species of grasshopper, beetles and bugs.

Hackhurst Downs consists of open grassland, scrub and mature woodland, managed in two sections by the National Trust and SWT. The top of the Downs and the dip slope include beech woodland and forestry plantations. Hackhurst Downs has been designated as a Site of Special Scientific Interest and as a Local Nature Reserve, due to its abundance of chalk grassland fauna and flora. At times the site is grazed with goats - the perfect animal for the steep slopes. Notable species of butterfly have been recorded including chalk hill blue, brown hairstreak, marbled white and the occasional silver spotted skipper.

SWT refers to the chalk grassland near us in Guildford as - 'Europe's tropical rainforest' as "many of these species are what we call specialists – they do not grow anywhere else –



View over grassland by Adrian Thompson

including stunningly delicate orchids, of which 16 species can be found in Surrey". SWT's website states that "Surrey has some 300 ha of flower-rich chalk grassland, alive with the excited humming of bees and beautiful dancing butterflies. The Trust manages some 15 chalk grassland sites. Before the Second World War, chalk grassland was widespread, but this habitat has seriously declined. We have lost more than 80% of our chalk grassland since WW11. This is partly due to changes in the way we use our land. Chalk grassland must be managed effectively to stop invasive scrub encroaching. The Trust works closely with other landowners to encourage sensitive management and we are determined to improve chalk grassland habitat in the North Downs – with an ambitious target of creating or restoring over 23ha within the next five years".

The Small Blue Butterfly Project (managed by Butterfly Conservation with the help of local volunteers) has been running for over 3 years to assist in this. There is a short explanatory video that gives more information on <https://butterfly-conservation.org/our-work/conservation-projects/england/surrey-small-blue-stepping-stones-project>. Should you wish to volunteer for any of the butterfly projects mentioned above, when COVID-19 rules allow again, [the link is](http://eepurl.com/ds7MaP) <http://eepurl.com/ds7MaP>.

Charles Eisenstein's essay: Extinction and the Revolution of Love - Two excerpts prefaced by Caroline Scott.

Read the [full essay here](https://charleseisenstein.org/essays/extinction-and-the-revolution-of-love/) <https://charleseisenstein.org/essays/extinction-and-the-revolution-of-love/>

The essay explores the work of Extinction Rebellion, and examines the environmental movement as a whole, asking through what lens we are understanding the ecological crisis?

Charles Eisenstein questions the focus on carbon, at the exclusion of all else, and posits that we should be thinking of the planet as a living being. He suggests that neither the climate change camp, nor the climate denial camp have really got to the root of the problem – ecocide, and that we must view ourselves as part of the ecosystem.

Exrtact 1 - Reflections on activism:

This discussion centres on the importance of environmental organisations to show empathy. A criticism levelled at XR has been that they have inconvenienced ordinary people, and the essay dwells on this. There's no doubt that these actions have attracted attention, and while inconveniencing some, they haven't caused harm. Nonetheless the point about making sure to include people, and the tone or content of the message, is a difficult one to get right.

"Adding to public distrust of activists is the self-righteousness that is coded into appeals to personal virtue. If we hold ourselves virtuous for our activism and low-carbon lifestyles, and grant ourselves self-approval and membership in the ranks of the moral, we thereby cast others into the ranks of the immoral, the ignorant, the

wrong. The more we douse ourselves in the perfume of virtue, the more we give off the stench of sanctimony. We would be more effective if, rather than holding ourselves apart in unforgiving judgement, we would seek to understand deeply the totality of the circumstances of those we judge. That is called inclusivity. It is the gateway to a revolution of love."

Extract 2 – Framing the question: what exactly is the truth?

Charles centres this essay around questioning the aims of Extinction Rebellion and how they are framing their activism.

There's no doubt that XR have shaken up the environmental activism movement. They have probably been one of the movements to get the closest to communicating the message of love for the earth as well as highlighting the perils of destroying it. Their central message remains confronting the truth about the climate emergency. But Eisenstein wonders, what actually is the truth? He wonders why XR and other movements centre human extinction as their main argument – when, so far, extinguishing other species has not lead to our extinction, but has depleted our souls.

"The first demand of Extinction Rebellion is that the government tell the truth about climate change, but does it even know the truth? Who is prepared to tell the truth that Earth is alive? That the cause of ecological degradation lies in the deepest stories that civilization tells itself? Who is prepared to tell the truth of what the crisis therefore asks of us – total transformation, an initiation into a new kind of civilization?"

"The climate movement has made human survival into the main issue. That is a mistake. Here are three reasons why: (1) It reinforces the valuing of nature for its use to human beings, which is the same mindset that has long facilitated its despoilation. (2) Whether or not it will continue to be true, experience has so far shown us that humans will survive just fine as the rest of life dies – more and more of ourselves, less and less of everything else. (3) It is dishonest to make the issue human survival, when that isn't really what motivates us. Suppose human survival in a dead world were guaranteed – would we breathe a sigh of relief and join the ecocide?"

John's article summarising some of the findings of the WWF Living Planet report 2020 makes sober reading. What can we as individuals and as a community do about it?

We are blessed in Surrey with a superb range of natural areas: a coverage of woodland at around 23% (nearly twice the national figure) and almost 12 ha designated ancient woodland sites. We have precious lowland heath areas of national biodiversity significance and chalk grassland known as the "temperate rainforests" for their astonishingly high levels of biodiversity. However, Surrey Wildlife Trust warns us that a third of Surrey's biodiversity is either locally extinct or heading that way.

It is widely acknowledged that we are living through not just a pandemic, but another even more wide-ranging and long-term change to our world: the Anthropocene (or man-made) mass extinction. The current rate of extinction of species is estimated at 100 to 1,000 times higher than natural background extinction rates.

Biodiversity loss, combined with habitat loss, is just as big an existential crisis as climate change. It has the potential to fundamentally damage the ecosystem services that we rely on from our planet. Services such as food production, availability of fresh water, our reservoir of new drugs and new bio-materials in our fight against disease and antibiotic resistance and in our development of new technologies. Not to mention the vital role that natural environments play in delighting us, inspiring us and preserving our mental health.

This is an issue that people care about: in the UK,

A new GEF Biodiversity Group – WE NEED YOU!

Article by Helen Harris

volunteering in biodiversity is increasing. As many as 70,000 volunteers submit biological records to National Recording Schemes (NRS) or to Local Environmental Records. However, the 2018 public sector expenditure on biodiversity in the UK, as a proportion of GDP, fell by 42% between 2008/9 and 2019 and the Joint Nature Conservation Committee who measured the UK Biodiversity Indicators 2020 for the government found that just 11% of the public are "highly engaged" with the issues of biodiversity conservation.

In 2020, however, the UK government has taken some positive action. It has:

- signed up to the High Ambition Coalition for Nature and People and committed to protect 30% of our landscape for nature by 2030 (an increase on 4% on the current area of national parks);
- launched the Environmental Land Management scheme to set up landscape-wide Nature Recovery Networks (NRNs);
- Set up a £25 million Nature Recovery Fund that will bring together businesses, landowners and local communities to protect and restore habitats, species and landscapes, as well as:
- A £640 million Nature for Climate Fund to support the creation, restoration and management of woodland and peatland habitats.

GEF is also evolving. We have developed our structure, forming three working groups around Climate, Biodiversity and Waste /recycling, each with a chair that sits on the GEF Exec. I have agreed to lead the biodiversity group for GEF and I am looking for GEF members with an expertise or simply an interest in biodiversity (and time) to work with me.

The first step will be to get together in early 2020 (virtually if need be) to debate and agree together how we think GEF can best use our resources to address the biodiversity crisis going forward:

- What should our aims be around local and national biodiversity?
- How can we best support important initiatives in Surrey including the development of Surrey's Nature Recovery Networks, adoption of better land management techniques to promote wildlife, conservation initiatives within Biodiversity Opportunity Areas and reduction in pesticide use.
- How can we best work with policy makers, land owners, other environmental organisations and stakeholders to promote biodiversity?

If you are interested to help with this process or would like to know more please contact me, Helen Harris at: helenlwharris@gmail.com



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Guildford Environmental Forum aims to improve the environment in and around Guildford for wildlife and for people and to build a sustainable future.

Join us in our work for the town and have this newsletter posted or emailed to you four times a year. Forum membership is only £10 per year or £15 for a couple, while for age 21-25 it's £5 and for under 21s it's free. New members are warmly welcomed. Please contact Adrian Thompson on 01483 222687 or email adrian@lampcottage.net

Guildford Environmental Forum's newsletter is published in March, June, September and December. Please send contributions for the next issue to Ellie Morgan (details above) by 14th Feb 2021. The views expressed in this newsletter are strictly those of its contributors and Guildford Environmental Forum.