Ludlow Quaker Journal

July 2020

This Journal will publish anything that Friends think is of interest; so its range may be very wide. If you find it too long, select only what interests you from the Table of Contents. Please contact Barbara Mark if you would like to have something included or wonder if you have a subject that might be of interest.
It will be published on-line only and will come out when enough articles have been gathered in. Comments and letters to the editor are also welcome.

Contents:

page 2. Meeting for Worship in the garden
page 3. David Milner cutting a cake to celebrate his 90th birthday
page 4. Photos of Dori at Hendra House
page 5. Doodles from Julia Reynolds
page 9. Two poems
page 10. Recipes: Beth's picnic loaf
page 11. Walnut fudge cream
page 12. Flat to let' and 'Quakers in Leominster', book by by Anne Adams
page 13. John Cherry's report on the Peace Museum
page 13. New mental health group
Page 14. Formal launch of the Pity of War
page 15. News from the Food Bank Olivier Peace lecture canceled
The Environment
page 16. Changing weather patterns
page 17. Reduction in birth rates
page 19. Air Quality report to Parliament.
Page 22. The emissions due to on-line meetings

Many thanks to everyone who has helped me on this issue.

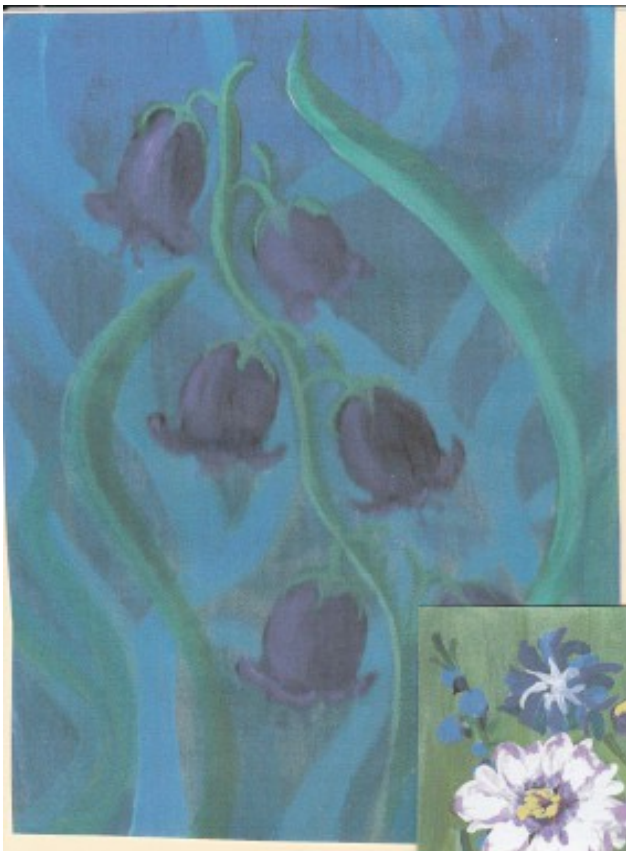
Ludlow Meeting has been holding Meeting for Worship in our own homes for many weeks but all at the same time. Some of us have felt a surge of energy as we sit down at 10.30am.
We have been able to socialise on zoom after Meeting for Worship, or on a Thursday morning thanks to two of our clerks Jane and Jamie Wrench, who have set up the zoom contract.
However some of us are now managing to have a Meeting for Worship outside in a friends garden since the government loosened the rules allowing up to 6 people to meet together out side.
Many thanks go to those who have opened up their garden for us. As the numbers are small we are meeting by arrangement only.
We have 4 gardens offered to us so far, Annie Wood's in Leominster, and here is a photo of Daniel's garden top, and Joy's below. What lovely settings.

Cynthia and Clive are also hosting a Meeting for Worship in their garden in Orleton. This is David Milner cutting a cake made by them to celebrate his 90th birthday. This photo is from refreshments after their worship on Sunday because his birthday fell on the following Monday, 20th July.

From Sunday July 19th Ludlow Meeting is now offering a zoom Meeting for Worship starting at 10.30am for those who would like that option.

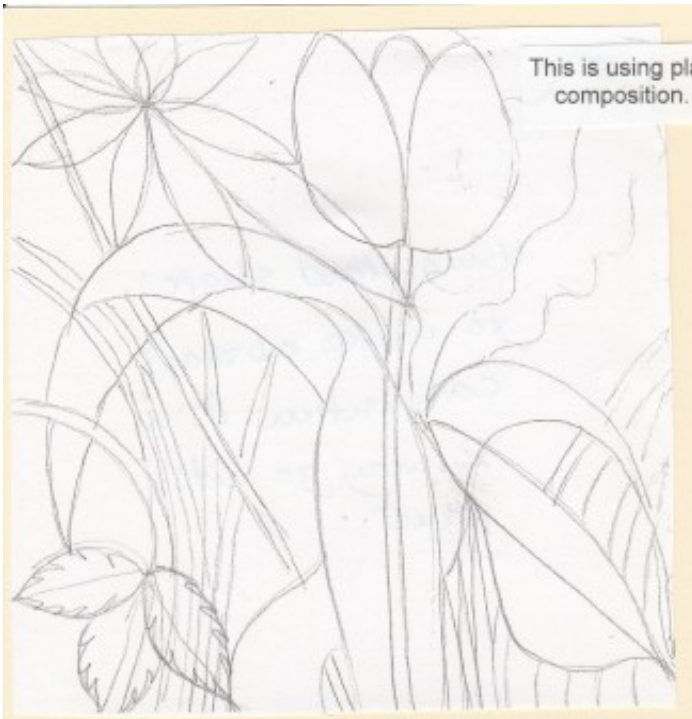
Here are some photos of Dori, by kind permission of Hendra House. She is keeping well and happy.

Following The Royal Academy's daily doodle idea Julia Reynolds has sent these ideas to the Journal for everyone to enjoy and may be inspired by, to do their own doodles.
Julia sent these photo copies. She says you can do them any size and on any base, from post cards to card board boxes.



Some are more 'real'
some are made up,
as is this.

I used up my paint on
this one.
A book that might be
of interest is:-
Unquiet Landscapes
by Christopher Neve
You might like to look at :-
Cedric Morris
Stanley Spencer
Eric Ravillious
(green houses)
Mary Fedden
and Matisse who both
do interiors and through
the window with plants.



This is using plant shapes to make abstract composition. As in 2 go into plant.

6) Using up paint. I am not sure if this is finished or not.

there is a lot of this around here
from the book Shakespeare's Flowers

This poem was sent in by Martin who saw it in Leominster in April

And when this is all over
We'll knock on our friends' doors
And go to every party
And say "I love you" more.

And when this is all over
Through bad, we will see the good
Because whenever we are together
We'll appreciate it, as we should.

And when this is all over
And we are no longer in this pain
We'll know to never take for granted
Those little things again.

This poem was sent in by Anne Adams and Jamie

Refugees – from Resurgence, May/June 2017, No. 302

They have no need of our help
So do not tell me
These haggard faces could belong to you or me
Should life have dealt a different hand
We need to see them for who they really are
Chancers and scroungers
Layabouts and loungers
With bombs up their sleeves
Cut-throats and thieves
They are not
Welcome here
We should make them
Go back to where they came from
They cannot
Share our food
Share our homes
Share our countries
Instead let us
Build a wall to keep them out
It is not okay to say
These are people just like us
A place should only belong to those who are born there
Do not be so stupid to think that
The world can be looked at in another way

(Now read from the bottom up)
by Brian Bilston: Book “You took the last bus home” Oct. 2016

Thankyou Beth for two more of your recipes.

Recipe 1
Picnic loaf. All prep is done the night before!

Ingredients
1 bloomer loaf
1 aubergine
1 large or 2 small courgettes
2 balls fresh mozzarella (!not buffalo, which is too soft for this recipe!)
2 or 3 ripe vine tomatoes
A bunch of fresh basil
Italian salami or ham (Leave out or replace with Quorn ham if veggie)
Olive oil
Salt & pepper
Tinfoil for wrapping

Method

Start the night before your picnic.

Slice the aubergine and courgette thinly lengthwise, brush with olive oil and grill until beginning to brown, turn over, brush with oil and repeat.
Stack the slices on a plate to cool.
If using fresh sweet peppers, either stick on a long skewer and hold with a glove, char the pepper over a gas flame until the skin blackens, turning frequently. If you don't have a gas cooker, put a baking tray on the bottom oven shelf, heat the oven to 180c and roast the peppers until soft and the skin is peeling. The tray is to save you having to clean the oven.
When the peppers are cooked, put them in a plastic bag or box while still hot, seal and leave to cool. (This makes skinning them easy) When cold, split the pepper, flatten and remove skin and seeds.
If this is too much like hard work, buy a jar of roasted peppers, drain and skin.
Always remove the seeds - these are the same family as chilli peppers and around one in twenty seeds will be red hot.
Remove the top of your bloomer loaf, making a lid to fit back afterwards.
Remove most of the centre of the loaf, leaving a little to soak up the yummy juices. Keep the middle to make breadcrumbs.
Slice the tomatoes and pull the leaves from the basil stocks.
Sprinkle the inside of your hollow loaf with a little olive oil and layer the cooled veg, cheese, meat and basil leaves, seasoning and sprinkling a little oil as you go. Don't go overboard with the oil or your loaf will be soggy.
Pack as much as you can into the loaf and replace the lid.
(Leftover filling can be roughly chopped and served with hot pasta and some parmesan.)

Wrap the loaf as tightly as you can in a double layer of tinfoil. You can use cling film if you prefer, but the tinfoil can be recycled.
Put the loaf on a large plate, put a second plate or dish on top and put in the fridge overnight.
The aim is to squash it a little and allow the flavours to develop.
Remember to take a sharp sererated knife to the picnic, and serve in thickish slices.

Recipe2

Walnut fudge cream

Made the day before

Ingredients
1 small tub double cream
Greek yoghurt
Soft dark brown sugar
Chopped walnuts
Biscuits to dip

Method

This is one of those recipes with no fixed quantities.
The only measuring is done by eye.

In a large bowl, whip the cream to the soft peak stage. Do not overwhip.
Add an equal amount by volume of plain Greek yogurt. There is quite a lot of room for adjustment, but equal amounts work best.
Mix using a figure of eight movement with a large spoon until the two are combined. (This keeps the air in the mix.)
Spread the resulting cream in a shallow dish (you're aiming for about an inch of cream) (for individual servings, use ramekins, this is very rich)
Level the top (by this stage the acid in the yoghurt has set the cream and the risk of losing the air in the mix is reduced).
Using your thumb and forefinger, sprinkle the surface thickly with the brown sugar. You shouldn't be able to see the surface of the cream when you finish) - this is messy, pretend you're 5 and making a sandcastle.
Cover the dish and refrigerate overnight.
The following day the sugar will have dissolved and both flavoured and coloured the cream.
To serve, sprinkle with chopped walnuts and give your guests biscuits to dip in the cream.
If you have someone who can't eat nuts, crumbled biscuits, either hobnobs or ginger nuts are a good alternative, in which case only spoons are needed.
This pudding will also keep happily in the fridge for 5 days, although I have never had any survive for that long.
The best biscuits for dipping are Langue du Chat. I can give a recipe for these on request. If you are keen on any particular recipes, let Barbara know and we will try to oblige.

Flat to Let
Flat 4, 3 College Street Ludlow, part of the College Court retirement development.
Upstairs flat, one of six converted from the former Ludlow Cottage Hospital.
Semi-sheltered: service includes part time warden, maintenance of buildings, gardens and outside structures, personal safety alarm and responding system.
Living room, two bedrooms, shower room, kitchen, electric night storage heaters, use of stair lift.
Very compact for two residents and occasional visitor (the maximum allowed) but comfortable living space for one.
Outgoings: Rent £500 pcm (6 months minimum) Council Tax (Band A), electricity, water.
Contact: Esther Rees 01584 876742

Book
'Quakers in Leominster, a Brief History by Anne Adams'

Anne Adams has written a book detailing the history of Quakers in Leominster. The book is titled "Quakers in Leominster, a Brief History" and can be purchased for £5 including postage directly from Anne.
Please contact her directly using her smquakers email address. You may view the latest post at http://www.smquakers.org.uk/quakers-in-leominster-a-brief-history-by-anne-adams

Quaker Arts Network has another newsletter out. I am afraid I can not put any of it here because of the lay out. However may I recommend you look at their web site. It is full of very exciting things and ideas, from new on-line theatre productions and more about the 'loving earth project'.

Their web site is :-
http://quakerarts.net/

Positive Money has also been extremely busy during lock down and has been a force to be acknowledged when it comes to thinking about where to go next and what things are important to a new view of our economy and our world.
Please do look at their web site if you get a chance.

Report on Peace Museum

The Peace Museum is in Bradford and is the only Museum in the UK dedicated to the history of and untold stories of peace peacemakers and the peace movement. They have a collection of some 8,000 objects which they use to make new exhibitions, educational outreach and to promote community cohesion. They have just published their Summer 2020 newsletter which records their disappointment at having to close their doors this March since they had planned an exciting programme of events and openings this year. Thanks to the National Lottery Heritage Fund they had received funding for an exhibition called *Bombs…Away* to mark the 75th anniversary of the bombing of Hiroshima and Nagasaki with Atomic bombs. Due to open in May, it has been put on hold and will be [resented sometime in the future. The loss of income from work with schools will have financial consequences, but the team are working from home, and doing all they can to keep in touch with their audience. Video content has become an important part of their output during lock down and these videos can be found on youtube.com by searching 'Peace Museum Bradford'. Our continued support for them is most helpful and I hope will continue in the coming years.
John Cherry

Here are some upcoming events about mental health.

Quaker Voices on Mental Health is a newly forming group, which will in time become a Quaker Recognised Body. It is a group for people interested, concerned or passionate about mental health. There will be an inaugural meeting online on 22nd August 2020 at which the shape of the work of the group will be discerned. There might be Friends you know would be interested; it might be possible to announce or to circulate the invitation.
The Quaker Mental Health Forum is an annual day conference – this is the fourth meeting. We meet online on 7th and 8th November 2020; our title is: 'The Covid yoyo: reflecting on mental health, well-being and spirituality through our pandemic stories.' There is no charge to attend and everyone is welcome – but we are limited to 100 places.
In Friendship
Alison Mitchell
Mental Health Development Officer

Email address quakervoicesonmentalhealth@gmail.com

Formal Launch on Hiroshima Day. This is not to distract from the bravery of those who lay down their lives but more to show how many non combatants also loose their lives in war.

‘Pity of War’
Memorial to the Nameless, Voiceless and Forgotten affected by war and conflict

In these strangest of times, when the pace of life change seems so fast, a new charity “Pity of War” will be formally launched on Hiroshima Day, 6 August, to remember millions of nameless, voiceless and forgotten individuals affected by war. Its objective is to promote increased awareness among the public of the wider impact of war upon civilians, a concern that has affected and continues to affect countless people worldwide each year.

The charity started as the concern of a Shropshire Quaker, the late Joyce Gee. Joyce’s home in London narrowly missed being bombed in the Second World War when she was a schoolgirl. The memories never left her. On a visit to the National Memorial Arboretum in Staffordshire in 2013 for the formal opening of the Friends Ambulance Unit/Friends Relief Service memorial, Joyce was struck by the lack of a specific memorial to civilian non-combatants.

The concern was taken up by Clun Valley Friends in Shropshire. From there it progressed to Southern Marches Area Meeting and Meeting for Sufferings. In the process it was discovered that Peter Walker, an internationally known sculptor, was already working along similar lines and had a concept in mind. Successful negotiations were conducted with the NMA for a memorial site, where the memorial will eventually reside. The memorial will take the form of a bronze bust standing on a high plinth. Models of the final design have been on display in a number of cathedrals, including Chester, Coventry, Salisbury and Lichfield, and have already been seen by tens of thousands of people, while 12 bronze models will be displayed permanently around the UK as well as at the British Embassy in Dubai. A maquette has also been on display at Friends House.

The design of the memorial—a blindfolded head, with neither ears nor mouth—powerfully symbolizes the impotence of the innocent civilian caught up in the horrors of war. It will be cast in bonze, two metres high, on a plain square 30 cm plinth and simple white gravel base.

Pity of War will not end its work with the memorial but will act as a catalyst for an ongoing educational program. As an expression of our Peace Testimony, it will work in schools and communities across the country in conjunction with exhibitions, readings and son-et-lumière, etc., raising awareness of not just the physical but also the psychological, social, educational, economic and cultural effects of war upon the civilian population.

Fundraising towards the memorial is underway and anyone interested in supporting the project or finding out more can do so at PityofWar.org and just giving
Hiroshima Day is being chosen for the launch as the civilian casualties and suffering in that city (and later in Nagasaki) in 1945 encapsulate like no other event the horror of war.

Report of the Ludlow Food Bank

We have just received the report from the Ludlow Food bank housed in the Baptist Church in the Rockspring Centre for the first six months of this year. It has clearly been an extraordinary six months for them. Demand has increased enormously, and this has caused reorganization in their administration, working methods (they are now open five days a week, volunteers (many older volunteers such as myself have been unable to attend and been replaced with younger people) and storage space. At first they expanded into areas of the Baptist Church, but as that is now making preparations to bring its rooms into use, they have had to find storage space offsite.
I quote from the report -
'The agency which has referred the most people to us so far this year is Connexus (previously South Shropshire Housing Association). This is followed by the Job Centre in Leominster. Things have been rather different this year, so we have not been able to be as stringent as usual. We have had a number of phone calls from people asking us directly for a food parcel. Often these phone calls have been quite distressing, with examples of lost government food boxes, people unable to access food or money and general panic.'
The requests mainly come from Ludlow since other food banks have been set up in neighbouring towns. A total of 300 parcels were handed out and the largest growth has been in the over 65s. There has been a noticeable increase in repeat parcels to the same people. The 'free school meal' voucher scheme for children's lunches (£15 a week) and its continuance over the summer holidays has prevented the Bank from being overwhelmed by requests from families.
The food bank has benefitted from donations in kind, especially from bodies like ourselves, although the limitations on storage space means that they would now prefer to be able to order food when particular items became fewer, in order to make the very best use of their storage facility. To do this they need money rather than tins. I will therefore discontinue collecting food for the Bank from the Meeting and suggest instead that the Meeting gives a monthly donation to the Bank for their purchase of what is needed.
John Cherry

Olivier Peace Lecture 2020

Sadly John has had to cancel Molly Scott Cato who was to give the Olivier lecture on September 30th in the Methodist Church. The Methodist church will not be open for third party groups until October, at the earliest. He has managed to arrange with her that the lecture will be postponed until 2021 and will be in touch with her early in the New Year to fix a date,
Many thanks John

Changing weather patters

Winter 2019 saw the worst floods ever recorded. Some local areas were under water from October to March 2020. There were 13 named storms, storm Denis was the worst, being one of the most intense extratropical cyclone ever recorded.
This spring was the fourth driest since records began in 1862. May was the driest May on record. However we should not have been surprised. The Scientist from the Intergovernmental Panel on Climate Change have been telling us for years our weather patters will become more extreme if we did not reduce our CO2 emissions.
Across the world we see the effects of climate change. Today, 15th July, the BBC bring us news that Siberia has been having a heat wave. That President Putin called a state of emergency in early June, and temperatures hit 38C in cities like Verkhoyansk. These temperatures, within the Arctic circle, are unheard of, and un -imagined, 'unequivocal evidence of human induced climate change' says Met Office.
So action will be forced on us all to mitigate for these changing climatic disruptions. Luckily enough, nature can help us. The natural worlds resources can draw down CO2 if it is a healthy environment. There is a problem here as well though because our nature is also being effected by the changing weather patterns. It has also become reduced due to farming methods and increased urbanisation. However any work to tackle the crisis in nature will also be work which will help reduce CO2 and regulate our weather patterns. The two problems are inseparable.
We know woodland, peatlands and even grasslands store carbon. In the sea ecosystems also store carbon, such as sea grass, algae and salt marshes. If these places are cared for and kept healthy they will work with us. Good soil, rich in organic matter, holds three times more carbon than is found in the air. The UK government is now looking into many measures to use nature to hold back water and make us more drought resistant, as well as helping with climate stability.
Thanks to many environmental organisations and naturalists guidance can be found on how best to restore our wildlife and reduce the growing impact of climate change.
Will it be long before we have forgotten that flooding was not every other year and that we did not expect to have droughts and heat waves every summer? Will it be long before we forget there were birds like turtle doves or flowers like Ragged Robin? We will have to adapt but let us not give up on the wildlife around us.

Information taken from Herefordshire Wildlife Trust (supporting wildlife trusts are a way to support nature in your areas)
Information about wild life loss can be found in the 'State of Nature 2019 report' which can be found on-line.

Intergovernmental Panel on Climate Change (IPCC) also have a web site to access if you want to know more but BBC a good source as well.
Barbara Mark

Reduction in Birth rate causes a stir in the media.

There has been some recent research which has caused alarm in some places. The expected number of people on the planet is now expected to peak at 9.7 billion around 2064, before falling down to 8.8 billion by the end of the century.

Researcher Prof Christopher Murray told the BBC that this was quite a new realisation and it will mean governments will need to re-think and plan for an ageing population.

It has nothing to do with sperm counts or fertility. Instead it is being driven because more women are in education and work, as well as having greater access to contraception, leading to women choosing to have fewer children.

It is also driven by increased economic stability in more countries so it is a success story, actually.

Japan's population is projected to fall from a peak of 128 million in 2017 to less than 53 million by the end of the century.

Italy is expected to see an equally dramatic population drop from 61 million to 28 million over the same time frame.

They are two of 23 countries - which also include Spain, Portugal, Thailand and South Korea - expected to see their population more than halve over that time period.

China, currently the most populous nation in the world, is expected to peak at 1.4 billion in four years time before nearly halving to 732 million by 2100. India will then take its place as the most populated country.

The UK is predicted to peak at 75 million in 2063, and fall to 71 million by 2100.

If we think about global warming, which is causing Climate Change, I think most of us would feel a reduction in birth rate is a good thing. It was interesting to listen to people who were interviewed by the BBC because the older generation asked why was there such panic. Older people are active these days and quite capable of playing an active role in society.

Barbara Mark

you may like to look at:-

Quaker Concern Over Population (QCOP)

QCOP help Friends within Britain Yearly Meeting to appreciate the dangers of global overpopulation. They see this as an appropriate area of interest for Friends following

the Canterbury Commitment. QCOP raise awareness by developing and delivering workshops. See their website to learn more.

Website: http://www.qcop.org.uk

Here is feed back from them on this issue:-My reaction to this is that this is encouraging, but not as impressive
as it may seem. The fact that growth is, as it is, no longer exponential is because people are doing something about it. Not necessarily with world figures in mind, perhaps, but more because of the percieved needs of individuals. The curve projected by the latest commentaries is not too different from the lowest of the three projections by UN. UN publish projections (not predictions - the difference is important), and these are a median projection (deduced from current trends) and a high and a low variant. You can see this on our website.
Even if we achieve that, it is still true that population at the moment is growing by a billion every twelve years, the fastest it has ever grown: that the world is consuming renewable resources at about 50% faster than the earth can renew them: that about 40% of all pregnancies in the developed world and elsewhere are unintentional; that the great number of abortions, safe and unsafe, argue that there is a huge unfulfilled demand for contraception: that two hundred million women of reproductive age are not using modern contraceptives: that contraception is opposed by a number of powerful bodies, including religious bodies and governments ruled by a populist agenda.
In other words there is still a huge amount to be done, much of which can be done easily, to reduce or even reverse population growth. My worry is that reports such as the current ones will cause people to think there is no particular issue, and that support for population activism will decline.

In Friendship, Roger Plenty

This has just been sent to the Area Meeting sustainability group

Coronavirus: Air quality beyond 2020

Owain Banfield
6-8 minutes

Air quality has long been a high profile issue. The Coronavirus pandemic has brought it back to the fore. In particular, concerns have arisen about whether there is a link between poor air quality and Covid-19 outcomes.

Researchers are also beginning to examine the effect of lockdown measures on air quality.

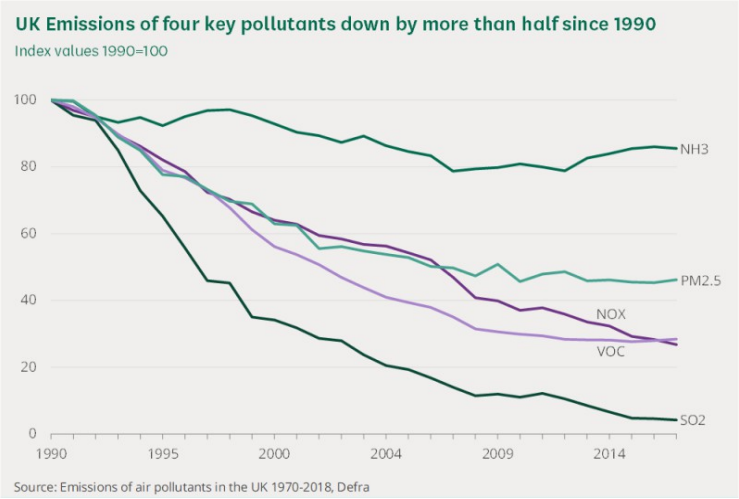
This Insight will examine the how the issue of air quality is tied up with Brexit negotiations and the coronavirus pandemic.

The backdrop of Brexit

The UK and EU are engaged in ongoing negotiations on trade and the future relationship. Both sides have agreed to a level playing field on environmental matters. But there are notable differences between the parties as to what this means. This in turn may affect future standards set on air quality.

Trends in air quality

Over the last 5 years annual emissions of key pollutants sulphur dioxide (SO2) and nitrogen oxides (NOX) have fallen. Fine particulate matter (PM2.5) and nonmethane volatile organic compounds (VOC) have levelled off. Ammonia (NH3) levels have increased.



Source and Image Description

The Clean Air Strategy

In January 2019 the Government published a Clean Air Strategy for England. It called air pollution the top environmental risk to human health in the UK.

The Strategy acknowledged the damaging effects of roadside and industrial pollution. It also set out the case for tackling other sources of air pollution, including those from intensive agricultural food production, heating homes and cleaning with certain solvents.

The Environment Bill

Some elements of the Clean Air Strategy require legislation. Provisions in the Environment Bill 2019-20 will introduce a duty to set a target for $PM_{2.5}$, a further long-term air quality target, and will amend the local authority air quality framework and powers.

The Bill will also establish a new environmental governance body. This is intended to take over the role of European Institutions at the end of the Brexit transition period. This new body will have a role in monitoring and enforcing air quality policy across England.

The Covid-19 pandemic

It is accepted that poor air quality makes people more susceptible to respiratory infections and other illnesses. The NHS has warned that those people with certain pre-existing conditions, such as respiratory illnesses, may have an increased vulnerability to Covid-19.

The Government has said in a PQ that

> …there is no clear evidence to suggest that nitrogen dioxide and/or nitric oxide have a direct link to the infection rate or death rate of COVID-19.

Public Health England and other Government departments are undertaking reviews, which includes "assessing whether there is any evidence of an association between exposure to gaseous pollutants or particulates and COVID-19 mortality in the United Kingdom."

Initial findings on Covid-19 and lockdown

Changes to working patterns and lifestyles during the lockdown are likely to have impact on air quality levels and locations of exposure. Many press articles have reported improvements in traffic related nitrogen dioxide levels.

The Air Quality Expert Group (an Expert Committee to Government that provides independent scientific advice), published initial findings in July 2020.These findings, based on non-peer reviewed observational data, showed evidence there was a drop in the emissions and concentrations of some pollutants.

The measured drop in emissions varied by pollutant. Nitrogen dioxide levels showed a consistent drop while PM2.5 exhibited a more variable pattern.

A contribution to the report by the Committee on the Medical Effects of Air Pollutants suggested the possibility that past exposure to air pollution was likely to impact on Covid-19. But it noted the need for further study of this.

There have been calls for a "green recovery" from Coronavirus, which includes asks on improving local variations in air quality.

Air quality governance and targets in the Environment Bill

The progress of the Environment Bill through Parliament has been delayed due to the pandemic. Environmental organisations are concerned that in turn this will delay the establishment of the new governance body.

The Bill will also require the Government to set an (unspecified) target for $PM_{2.5}$. In 2019 a feasibility study examined whether the UK could adopt the World Health Organization (WHO) recommended annual limit for PM2.5 of 10µg/m3 (micrograms). The Government concluded that, "it would be technically feasible to meet the WHO guideline level for PM2.5 across the UK in the future" but went on to say that:

> Substantive further analysis is needed to understand what would be an appropriate timescale and means, and we will work with a broad range of experts, factoring in economic, social and technological feasibility to do this.

A level playing field?

In the Political Declaration on the future relationship between the EU and the UK, both parties agreed to maintain a level playing field on environmental matters (including air quality). Trade and future relationships negotiation rounds, however, have revealed different approaches from each party.

This may have a bearing on whether the UK follows future EU changes to air quality standards. The EU's Green Deal contains proposals to review air quality standards in line with WHO guidelines.

A difference of opinion

The EU favours a prescriptive approach with strong enforcement mechanisms. It also wants a "ratchet clause." This model would mean that if both parties increase the level of protection, they cannot reduce it again.

The UK Government has repeatedly committed to uphold standards. But, it does not want commitment to specific standards included. The UK Government argues that its approach is similar to that adopted by the EU in trade agreements the EU has with other countries.

Further reading

Commons Library analysis of the Environment Bill 2019-20, *House of Commons Library*.

The UK-EU future relationship negotiations: Level playing field, *House of Commons Library*.

About the author: Louise Smith is a researcher at the House of Commons Library specialising in the environment.

Here is some information I found about Co2 emissions when using internet for meetings such as zoom. If anyone has another source of this type of information it would be good to know about.

The hidden pollution cost of online meetings

8th March 2020 -- Gerry McGovern

It is often assumed that online meetings are better for the environment than physical meetings. That is not always the case.

A one-hour audio call consumes about 36 MB of data per person.
A one-hour standard-definition video call consumes about 270 MB per person.
A one-hour high-definition video call consumes about 540 MB per person.
A one-hour ultra-high-definition video call consumes about 1.3 GB per person.

Assuming an average of one one-hour meeting a day involving two people, 250 days a year, then:

- The audio-only calls would emit 0.08 kg of CO2.
- The standard-definition video calls would emit 0.6 kg of CO2.
- The high-definition video calls would emit 1.1 kg of CO2.
- The ultra-high-definition calls would emit 2.8 kg of CO2.

An average tree can absorb about 10 kg of CO2 per year. Here's the equivalent number of people calling that would be required in order for it to be necessary to plant one tree in order to offset the pollution:

- 270 people for audio only
- 36 for standard-definition video
- 18 for high-definition video
- 7 people for ultra-high-definition video.

The average CO2 emissions from new passenger cars registered in the European Union in 2018 was 0.1204 kg of CO2 per kilometer. Thus, on a yearly basis:

- The audio-only calls would be the equivalent of driving 0.7 of a km.
- The standard definition video calls would be the equivalent of driving 5 km.
- The high-definition video calls would be the equivalent of driving 9 km.
- The ultra-high-definition calls would be the equivalent of driving 23 km.

It's much better to have an online meeting than to drive to a meeting, it would seem. Well, it's not that simple. The above estimates relate to the streaming costs for online meetings. There are also processing costs. In many organizations meetings are saved and stored and sometimes watched later by others. There are costs relating to the devices used for the meetings.

Based on initial calculations, we estimate that streaming may represent no more than 5% of the total costs. So, for meetings using high-definition video, for example, based on our scenario above, it could be the equivalent of driving 375 km per year. This still a quite reasonable figure, but is a lot higher than the streaming-only costs of 9 km per year.

What happens if people drive to the office and go on conference calls with other people in that very office? What happens if far more meetings now occur online than were held offline? What happens if far more people attend online meetings?

These are the things that I've noticed. When working with larger organizations, I've regularly been part of meetings with anywhere from 20 to 100 people; far more people than would have attended if the meetings had been held in a physical space.

Used wisely, digital can be better for the environment. However, time and time again, I have found that digital behaves as an accelerator, as a duplicator, as a copier, as a reproducer, as an encourager of wasteful behaviour.

Digital is not green. What is so much better than digital meetings are no meetings, fewer meetings, meetings that take a lot less time, meetings that are useful.

GB per hour for audio calls, Zoom