No political will to save wildlife in Britain or the European Union

https://www.theguardian.com/environment/2018/mar/28/our-wildlife-can-be-saved-but-only-with-political-will

I agree with Jeremy Cushing. There is no sign of a political revolution either in Britain or in the European Union. European agriculture ministers are in a state of denial over the destructive impact of farming on wildlife and are pushing for a new common agriculture policy (CAP) from 2021 to 2028 which maintains generous subsidies for big farmers and pretends to be 'green'. On 20/03/2018 the EU presidency claimed that the CAP continued to provide safe food while defending farmers and "*protecting the environment*". https://www.theguardian.com/environment/2018/mar/23/eu-in-state-of-denial-over-destructive-impact-of-farming-on-wildlife?CMP=share_btn_fb

In September 2016 <u>The UK State of Nature Report</u> showed that Britain had lost significantly more nature over the long term than the global average, with the UK the 29th lowest out of 218 countries. According to the Report: "<u>Around 75% of the UK is managed for food</u> production. How we manage that land is key to the state of Nature."

https://www.theguardian.com/environment/2016/sep/14/one-in-10-uk-wildlife-species-facesextinction-major-report-shows

Together with historical deforestation and industrialisation, these trends have left the UK "among the most nature-depleted countries in the world", with most of the country having gone past the threshold at which "ecosystems may no longer reliably meet society's needs". The comprehensive scientific report, compiled by more than 50 conservation organisations, spells out the destructive impact of intensive farming, urbanisation and climate change on habitats from farmland and hills to rivers and the coast. It found that the fall in wildlife over the last four decades cannot be blamed on past harm; but has continued in recent years.

The report includes a new "<u>biodiversity intactness index</u>", which analyses the loss of species over centuries. "It wasn't just all back in 70s and 80s, it is still happening now," said Mark Eaton, at RSPB and the lead author of the report. "We are getting ever more efficient in our farming. In a way it is something to be celebrated, how good our farming science and technology is, <u>but it does squeeze nature out</u>."

"It is quite shocking where we stand compared to the rest of the world, even compared to other western European countries: <u>France and Germany are quite a way above us in the</u> <u>rankings</u>," said Eaton. "The index gives an idea of where we have got to over the centuries, and we are pretty knackered."

https://www.theguardian.com/environment/gallery/2016/sep/14/2016-state-of-nature-reportwildlife-winners-and-losers-in-pictures

<u>A spokeswoman for the Department of Environment, Food and Rural Affairs (Defra)</u>, said: "Our natural environment is cleaner and healthier than at any time since the industrial revolution - woodland cover in England is at its highest level since the 14th century, we have improved water quality in 9,000 miles of rivers since 2010 and in the last five years almost 19,000 miles of hedgerow have been planted." However, the government's own assessment, published in August, found that much of England's best-loved wildlife remains in serious decline, with 75% of over 200 "priority" species across the country falling in number.

<u>At that time France and Germany were quite a way above the UK in the rankings</u>. The NFU and Defra were in denial about farmers being responsible for losses of biodiversity. NFU vice-president Guy Smith said *"intensification of farming had ended in the early 1990s."* that farmers *"were using less fertiliser and pesticides than ever"* and a spokeswoman from Defra said: *"Protecting our precious environment and supporting our world-leading farmers, a cornerstone of our economy, will form an important part of our EU exit negotiations."*

The Soil Association found that more pesticides than ever were being used by farmers At the Royal Society of Medicine Conference on pesticides safety the Soil Association presented alarming figures. Under FOI request FERA Science (previously a government agency, now privatized) provided figures that showed that the number of active ingredients applied to wheat had risen **12-fold** from 1.7 in 1974 to 20.7 in 2014; that those applied to potatoes had risen 5.8 times from 5.3 in 1975 to 30.8 in 2014; that those applied to onions and leeks had risen 18-fold from 5.3 in 1975 to 30.8 in 2014. Pesticides are tested individually but no one tests the cocktail of pesticides to which humans and the environment are exposed. The Chief Scientist for Defra Professor Ian Boyd pointed out that once a pesticide is approved there is no follow up. Dr Michael Antoniou, head of the Gene Expression and Therapy Group at King's College London, told the Royal Society of Medicine conference that the adjuvants in commercial pesticide formulations can be toxic in their own right and in some cases more toxic than the declared active ingredients. Yet only the active ingredients are tested and assessed for long-term health effects in the regulatory process. Dr Antoniou also said that research on hormone-disrupting chemicals, including pesticides, shows that very low realistic doses can be more toxic than higher doses. Professor Carl Leifert talked about pesticides linked to low sperm quality. In a recent study, published in JAMA Internal Medicine, Harvard researchers followed 325 women at an infertility clinic and found that women who regularly ate pesticide-treated fruits and vegetables had lower success rates getting pregnant with IVF, while women who ate organic food had reduced risk of pregnancy loss and increased fertility.

Dave Bench Head of UK Chemicals Regulation Division described the regulatory system for pesticides <u>as robust and as balancing the risks of pesticides against the benefits to society</u>. Fera statistics show that <u>in 2014</u> glyphosate was used on Wheat (601,330 kg) Winter barley, Spring barley, Oats, Rye, Triticale, Oilseed rape (577,969 kg), Linseed, All potatoes, Peas, Beans, Sugar beet, with a total of 1,765,465 kg glyphosate on all crops. The total weight of pesticides (herbicides and desiccants, fungicides, growth regulators, molluscicides and repellants, insecticides and seed treatments) applied to farmland in 2014 was in excess of 16,000 tonnes. Some farmers started spraying glyphosate pre-harvest on crops in 1980 at the suggestion of a scientist who worked for Monsanto.

http://gmwatch.org/en/news/latest-news/17988-scientists-warn-of-toxic-chemical-cocktail-in-food

UK Farming Minister wants to free the UK of environmental protection laws

George Eustice the UK Farming Minister was interviewed by Arthur Neslen about Brexit. The Minister said: "The <u>birds and habitats directives</u> would go," and on pesticides, "the EU's <u>precautionary principle</u> needed to be reformed in favour of a US-style risk-based approach,

allowing faster authorisation". The UK could develop a more flexible approach to environmental protection free of "spirit-crushing" Brussels directives if it votes to leave the EU, the farming minister, George Eustice, has said. Speaking to the Guardian, the pro-Brexit minister said a leave vote in the 23 June referendum would free up a £2bn green dividend that could be spent on insurance schemes and incentives for farmers. But Eustice's fellow environment minister Rory Stewart told the Guardian that EU membership was crucial to the UK's environmental protections.

https://www.theguardian.com/politics/2016/may/30/brexit-spirit-crushing-green-directivesminister-george-eustice

CRD Head of Regulatory Policy defended the authorisation of glyphosate and 393 other pesticides; 'none of these were at a level to suggest a risk to human health'

Chemicals Regulation Directorate (CRD) Head of Regulatory Policy replied to me on 28/02/2014 to defend the authorisation of glyphosate. He told me that the capability to detect individual pesticides in food had increased from 150 in 2003 to 393 in 2012. He stated: "In the 2012 Report, although there were a large number of residues found in bread, none of these were at a level to suggest a risk to consumer health." However, he failed to reply to my question as to why the European Food Safety Authority (EFSA) was regularly increasing the Maximum Residue Levels (MRLs) of glyphosate in foods at the request of Monsanto to accommodate their practice of desiccation of crops and to protect their imports into Europe.

Ecological Armageddon after dramatic plunge in insect numbers 18/10/2017

In October 2017 Germany found that three quarter of flying insects had vanished in 25 years in protected habitats surrounded by intensively farmed land. It was predicted that the world is "on course for ecological Armageddon", with profound impacts on human society. <u>Part of Abstract</u>: Global declines in insects have sparked wide interest among scientists, politicians, and the general public. Loss of insect diversity and abundance is expected to provoke cascading effects on food webs and to jeopardize ecosystem services. Here, we used a standardized protocol to measure total insect biomass using Malaise traps, deployed over 27 years in 63 nature protection areas in Germany (96 unique location-year combinations) to infer on the status and trend of local entomofauna.

When the total weight of the insects in each sample was measured a startling decline was revealed. The annual average fell by 76% over the 27-year period, but the fall was even higher – 82% – in summer, when insect numbers reach their peak.

https://www.theguardian.com/environment/2017/oct/18/warning-of-ecological-armageddon-afterdramatic-plunge-in-insect-numbers

Catastrophe as scientists reveal the massive decline in bird populations in France

On 21/03/2018 two research papers revealed French bird populations had fallen by a third in the past 15 years as a result of loss of insects. It was front page in *Le Monde* but failed to gain prominence in the British media. The French scientists said this was symptomatic of the future facing Europe as a whole of "*biodiversity oblivion.*" It was a pattern repeated across Europe. "*The situation is catastrophic*," said Benoit Fontaine, a conservation biologist at France's National Museum of Natural History and co-author of one of the studies. "*Our countryside is in the process of becoming a veritable desert*," he said in a communique released by the National Centre for Scientific Research (CNRS), which also contributed to the findings. The primary culprit, researchers speculate, is the intensive use of pesticides on vast tracts of monoculture crops, especially wheat and corn.

The problem is not that birds are being poisoned, but that the insects on which they depend for food have disappeared.

"There are hardly any insects left, that's the number one problem," said Vincent Bretagnolle, a CNRS ecologist at the Centre for Biological Studies in Chize. Recent research, he noted, has uncovered similar trends across Europe, estimating that flying insects have declined by 80%, and bird populations have dropped by more than 400m in 30 years.

https://www.theguardian.com/world/2018/mar/21/catastrophe-as-frances-bird-populationcollapses-due-to-pesticides

Glyphosate and AMPA are found to be widespread in soils throughout the EU

Britain was cited as having the second most polluted soil, but glyphosate levels are not yet measured in groundwater in the UK. The European Commission's own Joint Research Centre published this paper.

http://www.sciencedirect.com/science/article/pii/S0048969717327973

Le Monde, the 'most sober' of national journals, splashed the fact across the top of its front page: the UK Corporate Media remains silent. The UK Science Media Centre is funded by industry, the UK government and the Wellcome Trust (that hosts the SMC) Britain has lost half of its wildlife. Now's the time to shout about it.

"Most Britons remain blithely unaware that since the Beatles broke up, we have wiped out half our wildlife. Intensive farming is the problem. Three generations of making agriculture more industrial have given Europe cheap food on a mammoth scale, but a terrible environmental price has eventually been paid, which we are only now understanding. The heart of the matter is universal pesticide use: we benefit from farming wholly based on poison, which has exterminated more and more of the insects at the base of myriad food chains in the natural world."

https://www.theguardian.com/commentisfree/2018/mar/26/wildlife-modern-farming-insects-birds

The UK SMC and EFSA also suppressed the research by Prof Gilles-Eric Séralini

In 2012, Séralini's team performed 24-month feeding studies in rats (GM Roundup[®] Ready maize, also with Roundup[®] separately) instead of Monsanto and EFSA's 90 days. Séralini's team found disturbances of liver and kidney function. Tumours started to grow in males at 4 months (mostly renal) and females (mostly mammary) and there was evidence of endocrine disruption. Authors' highlights:

- A Roundup[®]-tolerant maize and Roundup[®] provoked chronic hormone and sex dependent pathologies.
- Female mortality was 2–3 times increased mostly due to large mammary tumours and disabled pituitary.
- Males had liver congestions, necrosis, severe kidney nephropathies and large palpable tumours.
- This may be due to an endocrine disruption linked to Roundup[®] and a new metabolism due to the transgene.
- GMOs and formulated pesticides must be evaluated by long-term studies to measure toxic effects.

Professor Gilles-Eric Séralini was honoured with the 2015 Whistleblower Award by the Federation of German Scientists (VDW)

Prof Séralini received the award in recognition of his research demonstrating the toxic effects of Roundup herbicide on rats when administered at a low environmentally relevant dose over a long-term period. After the research was published, Prof Séralini was attacked in what the VDW and IALANA call "a vehement campaign by 'interested circles' from the chemical industry" as well as from the industry-funded UK Science Media Centre. This smear campaign led to the retraction of his team's paper by the first journal that published it. But Prof Séralini and his team fought back, countering the scientific arguments raised against their research and republishing their paper in another journal.

Prof Séralini says Roundup is an endocrine and a nervous system disruptor: an overview of 30 years of their research in France

Roundup and other glyphosate-based herbicides are the most widely used pesticides in the world; their residues are among the main pollutants in surface waters. Their use has increased through the spraying of 80% of edible agricultural GMOs, which also contain high levels of their residues. They are composed of glyphosate (35–40% in general) and adjuvants that are around 1,000 times more toxic than glyphosate alone and are also endocrine disruptors below toxic thresholds. All endocrine disruptors (ED) are also nervous system disruptors (ND), because they act as "spam" for cell-cell communication, in the sense that they are spurious messages (or molecules) sent to a group of organisms or cells, impeding and slowing down, and in some cases accelerating, the physiological communication system. Therefore, they should be called ENDs (endocrine and nervous system disruptors). From 0.1 ppb in chronic tests in vivo, Roundup is highly tumorigenic, provoking hormone-dependent tumours, other hormonal imbalances, and important liver and kidney toxicities. Pesticide adjuvants play the same role in other pesticide formulations. The declared active principles often appear to be by far the least toxic compounds after water in formulations. Unfortunately for public health, they are the only substances tested by companies for regulatory purposes over the long term in vivo. Thus, the acceptable daily intakes deduced from these tests are 1000–10 000 times too high. In regulatory tests the deleterious effects in rats are compared with historical data on rat pathologies. Analysis of laboratory rodent feeds sourced from five continents reveals that they are so contaminated by pollutants that comparison to these hence inappropriate controls generally masks the chronic pathologies provoked by the pesticides and other chemicals tested. The disputes with industry representatives and lobby groups that arose in the course of this research are also summarized in this short review. Finally, potential methods of improving transparency and advancing scientific knowledge are recommended.

http://www.amsi.ge/jbpc/31515/jbpc31515.html

Roundup is associated with Dementia, Alzheimer's Disease, Parkinson's Disease, Motor Neurone Disease and Multiple Sclerosis

These neurodegenerative disorders have increased over the last 30 years or so in the UK and the US.

http://people.csail.mit.edu/seneff/2018/Roundup_and_Neurodegenerative_Disorders_RosemaryM ason.pdf

Cancer Research UK was hi-jacked by the agrochemical industry in 2010

Michael Pragnell (CBE, awarded in 2016 for services to cancer) former Chairman of Cancer Research UK was founder of Syngenta and former Chairman of CropLife International. It was formed in 2001 from BASF, Bayer, Dow, DuPont, FMC Corp, Monsanto, Sumitomo and Syngenta. <u>The CRUK website says that there is no convincing evidence that pesticides cause</u> <u>cancer</u>. Instead CRUK links cancer to life style choices: alcohol, obesity and smoking. Cancer Research UK figures for 2014 (that don't seem to have been published by the Corporate Media) <u>shows the huge numbers of cancers that are killing people in the UK</u>.

In 2014 in Britain there were 13,605 new cases of Non Hodgkin Lymphoma (4,801 deaths)

<u>41,265 new cases of bowel cancer</u> (15,903 deaths); <u>12,523 new cases of kidney cancer</u> (4,421 deaths); <u>5,550 new cases of liver cancer</u> (5,091 deaths); <u>5,419 new cases of melanoma</u> (2,459 deaths); <u>3,404 new cases of thyroid cancer</u> (376 deaths); <u>10,063 new cases of bladder cancer</u> (5,369 deaths); <u>9,324 new cases of uterine cancer</u> (2,166 deaths); <u>7,378 cases of ovarian cancer</u> (4,128 deaths) <u>9,534 new cases of leukaemia</u> (4,584 deaths); <u>55,222 new cases of invasive breast cancer</u> (11,433 deaths); <u>46,690 new cases of prostate cancer</u> (11,287 deaths); <u>8,919 new cases of oesophageal cancer</u> (7,790 deaths) and <u>5,501 new cases of myeloma</u> (2,928 deaths); <u>2,418 new cases of testicular cancer</u> (60 deaths); in 2015 <u>9,921 new cases of pancreatic cancer</u> (8,817 deaths in 2014). <u>In the US in 2014</u> there were <u>24,050 new cases of myeloma</u>.

The Monsanto Papers show that Monsanto fabricated evidence and colluded with the US Environmental Protection Agency and the European Food Safety Authority

These are some of the cancers that plaintiffs in the US have alleged have been caused by Roundup. Attorneys for Baum Hedlund have been acting on behalf of these plaintiffs. The lawsuit began on March 13th 2017 U.S. District Judge Vince Chhabria ruled — over Monsanto's objections — that documents obtained by plaintiffs through discovery could be unsealed.

<u>Page 14 line 1</u> Dr Williams Heydens admitted that he 'ghost-wrote' an article for Gary Williams: "Roundup herbicide does not pose a health risk to humans" when their own scientists privately wrote that: "[t]he terms glyphosate and Roundup cannot be used interchangeablyFor example you cannot say that Roundup is not a carcinogen...we have not done the necessary testing on the formulation to make that statement." <u>http://baumhedlundlaw.com/pdf/monsanto-documents/daubert-brief/Plaintiffs-1-Response-in-</u> <u>Opposition-to-Monsanto-Companys-Daubert-and-Summary-Judgment-Motion.pdf</u>

After 1 year of revelations from unsealing Monsanto email exchanges, including ones with the US Environmental Protection Agency and the European Food Safety Agency that show collusion amongst the regulators, it is about to end. Judge Chhabria will have judged the "science" between eight independent scientists that say that Roundup does cause cancer and four on behalf of Monsanto that deny it.

The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services

(IPBES) Report published in March 2018: "Biodiversity – the essential variety of life forms on Earth – continues to decline in every region of the world, significantly reducing nature's capacity to contribute to people's well-being. This alarming trend endangers economies, livelihoods, food security and the quality of life of people everywhere, according to four

landmark science reports released today, <u>written by more than 550 leading experts, from</u> over 100 countries."

https://www.ipbes.net/news/media-release-worsening-worldwide-land-degradation-now-'critical'undermining-well-being-32

On 22/03/2018 Damian Carrington interviewed the eminent biologist Prof Paul Ehrlich

"A shattering collapse of civilisation is a "near certainty" in the next few decades due to humanity's continuing destruction of the <u>natural world that sustains all life on Earth</u>, according to biologist Prof Paul Ehrlich ...there is an increasing toxification of the entire planet by synthetic chemicals that may be more dangerous to people and wildlife than climate change. Ehrlich also says an unprecedented redistribution of wealth is needed to end the over-consumption of resources, but "<u>the rich who now run the global system – that</u> <u>hold the annual 'world destroyer' meetings in Davos</u> – are unlikely to let it happen".

Ehrlich is also concerned about chemical pollution, which has already reached the most remote corners of the globe. *"The evidence we have is that toxics reduce the intelligence of children, and members of the first heavily influenced generation are now adults."*

He treats this risk with characteristic dark humour: "The first empirical evidence we are dumbing down <u>Homo sapiens</u> were the Republican debates in the US 2016 presidential elections – and the resultant <u>kakistocracy</u>. On the other hand, toxification may solve the population problem, since <u>sperm counts are plunging</u>."

He says: "You don't need a scientist to know what's causing the sixth mass extinction. It's simple. It's us."

https://www.theguardian.com/cities/2018/mar/22/collapse-civilisation-near-certain-decades-population-bomb-paul-ehrlich

UN Rapporteur: Report of the Special Rapporteur on the right to food: Pesticides are "global human rights concern" and UN experts urge new treaty

The United Nations received a <u>report</u> by the Special Rapporteur on the right to food, presented to the United Nations Human Rights Council, focused more narrowly on agricultural chemicals. The UN report states unequivocally that the storyline perpetuated by companies like Monsanto—the one that says we need pesticides to feed the world—is a myth. The Report presented to the UN human rights council on 08/03/2017, is severely critical of the global corporations that manufacture pesticides, accusing them of the *"systematic denial of harms"*, *"aggressive, unethical marketing tactics"* and heavy lobbying of governments which has *"obstructed reforms and paralysed global pesticide restrictions"*.

GENEVA (7 March 2017) – Two United Nations experts are calling for a comprehensive new global treaty to regulate and phase out the use of dangerous pesticides in farming and move towards sustainable agricultural practices. They say: *"excessive use of pesticides are very dangerous to human health, to the environment and it is misleading to claim they are vital to ensuring food security."* - Chronic exposure to pesticides has been linked to <u>cancer, Alzheimer's and Parkinson's diseases, hormone disruption, developmental disorders and sterility</u>. Farmers and agricultural workers, communities living near plantations, indigenous communities and pregnant women and children are particularly vulnerable to pesticide exposure and require special protections. –

The experts warn that certain pesticides can persist in the environment for decades and pose a threat to the entire ecological system on which food production depends. The excessive use of pesticides contaminates soil and water sources, causing loss of biodiversity, destroying the natural enemies of pests, and reducing the nutritional value of food. The impact of such overuse also imposes staggering costs on national economies around the world.

The experts say the use of neonicotinoid pesticides is particularly worrying because they are accused of being responsible for a systematic collapse in the number of bees around the world. For example, heavy use of these insecticides has been blamed for the 50 per cent decline over 25 years in honeybee populations in both the United States and the United Kingdom of Great Britain and Northern Ireland. Such a collapse, they say, threatens the very basis of agriculture as 71% of crop species are bee-pollinated.

UN Report statements on pregnant women and children

<u>Para. 24</u>. Children are most vulnerable to pesticide contamination, as their organs are still developing and, owing to their smaller size, they are exposed to a higher dose per unit of body weight; the levels and activity of key enzymes that detoxify pesticides are much lower in children than in adults. Health impacts linked to childhood exposure to pesticides include impaired intellectual development, adverse behavioural effects and other developmental abnormalities. Emerging research is revealing that exposure to even low levels of pesticides, for example through wind drift or residues on food, may be very damaging to children's health, disrupting their mental and physiological growth and possibly leading to a lifetime of diseases and disorders."

http://www.pan-uk.org/site/wp-content/uploads/United-Nations-Report-of-the-Special-Rapporteuron-the-right-to-food.pdf

The UN expert on Toxics Baskut Tuncak wrote in the *Guardian* on 06/11/2017: The EU and glyphosate: it's time to put children's health before pesticides

"Our children are growing up exposed to a toxic cocktail of weed killers, insecticides, and fungicides. It's on their food and in their water, **and it's even doused over their parks and playgrounds.** The UN Convention on the Rights of the Child, the most ratified international human rights treaty in the world (only the US is not a party), makes it clear that states have an explicit obligation to protect children from exposure to toxic chemicals, from contaminated food and polluted water, and to ensure that every child can realise their right to the highest attainable standard of health. These and many other rights of the child are abused by the current pesticide regime. <u>These chemicals are everywhere and they are</u> <u>invisible</u>. The only way to protect citizens, especially those disproportionately at risk from exposure, is for governments to regulate them effectively, in large part by adhering to the highest standards of scientific integrity.

https://www.theguardian.com/environment/2017/nov/06/the-eu-and-glyphosate-its-time-to-putchildrens-health-before-pesticides

Rosemary Mason 03/04/2018