

## Open Letter to HSE, Defra and CRD about Roundup poisoning people and the environment

<b>Complaints to HSE/Defra and CRD about Roundup poisoning our nature reserve and also people. This blanket spraying of herbicide on the public was against the advice of the DIRECTIVE 2009/128/EC OF THE EUROPEAN PARLIAMENT but on the recommendation of the agricultural industry</b>	<b>2</b>
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Between 2014 and 2017 HSE/Defra/CRD refused to ask the Council to stop spraying Glyphosate-based herbicides on Japanese Knotweed in the valley below us because it was poisoning our nature reserve and the surrounding area. This was even though we said there was glyphosate in the water at levels that promoted the growth of breast cancer cells in the lab and Cancer Research UK had reported 55,122 new cases of invasive breast cancer in 2015 and 11,563 deaths in 2016.<sup>1</sup>

They said it was “still legal.”

During the summer and autumn of 2016, Swansea City and County Council authorised the spraying of 3,000 km of Roundup on city roadsides, street by street and ward by ward, in a ‘war on weeds’ (There’s no hiding place for weeds) *Swansea Leader*. November 2016.

I obtained FOEs for Spraying Dakar Pro (a professional preparation of Roundup) for 2016 and 2017. Dakar Pro was sprayed on pavements, street by street and ward by ward including schools, playgrounds, playing fields, Hospitals and Old People’s Homes. More than 3 tonnes of Dakar Pro were sprayed on the citizens of Swansea between April 2016 and end of July 2017.

In 2018, I was diagnosed by my neurologist as having developed a progressive degenerative demyelinating disorder secondary to prolonged exposure to Glyphosate-based herbicides.

**The British Government refused to legislate on the Sustainable Use of Pesticides 21 October 2009: DIRECTIVE 2009/128/EC OF THE EUROPEAN PARLIAMENT and rejected the EU advice<sup>3</sup>**

Article 11 Use of pesticides in specific areas

EU Directive Advice: Use of pesticides can be particularly dangerous in very sensitive areas such as Natura 2000 sites protected in accordance with Directives 79/409/EEC and 92/43/EEC. **In other places such as public parks and garden, sports and recreation grounds, school grounds and children’s playgrounds, and in the close vicinity of healthcare facilities, the risks from exposure to pesticides is high.** In these areas, the use of pesticides should be minimized or prohibited. When pesticides are used, appropriate risk management measures should be established and low-risk pesticides as well as biological control measures should be considered in the first place.

Government Response: We do not consider it necessary to prohibit the use of pesticides in public spaces or conservation areas or to impose new statutory controls on pesticide use in these areas.

**We believe that the UK can meet its obligations under the Directive through existing statutory and voluntary controls and develop additional voluntary measures.**

In December 2010 Lord Henley, the then Under-Secretary of State for Defra, explained why the UK weren’t going legislate. He said that the British had an “*ideological dislike of legislation*”, there were “*dangers of over-legislating*.” He said that decisions by the UK government on the European Union Directive (2009/128/EC) were based on “*robust scientific evidence*”.

----- Forwarded Message -----

**Subject:**Roundup sprayed in Swansea - CETO/358/16

**Date:**Tue, 20 Dec 2016 11:26:06 +0000

**From:**[Dan.Manghai@hse.gov.uk](mailto:Dan.Manghai@hse.gov.uk)

**To:**[rosemary.mason01@btinternet.com](mailto:rosemary.mason01@btinternet.com)

<sup>1</sup> <https://www.cancerresearchuk.org/health-professional/cancer-statistics/statistics-by-cancer-type/breast-cancer>

Dear Dr Mason,

Thank you for your emails and attachments of 9 and 19 December to HSE's Chair, Martin Temple, and the one of 14 December to me. Further to my acknowledgement of 9 December I am now writing with a substantive response. The various points you raise have been addressed in previous correspondence between you and HSE or Defra so there is nothing further to add on these. With regard to your key point on the use of glyphosate by Swansea Council, glyphosate is approved as a pesticide active substance in the EU and glyphosate products are authorised for use in the UK. The Council's duty in this case is to use pesticide products which are authorised in the UK and to comply with the rules on use of pesticides. In doing this, it is for the Council to decide how it chooses to control weeds in its area not HSE.

Yours sincerely,

**Dan Manghai**  
**Chief Executive, Parliamentary and Secretariat Office**  
**Health and Safety Executive**

On 17 October 2017 I was invited by CRD to submit an HSE incident form, but had no reply. On 10 November 2017 I wrote to the Head of Regulatory Policy and the Chemicals Regulation Division. "As you requested I have submitted the HSE incident form but have heard nothing from HSE. I attach FOEI that shows that more than 3 tonnes of Roundup were sprayed on the citizens of Swansea including schools, playgrounds, playing fields, Hospitals and Old People's Homes between April 2016 and end of July 2017. **IT IS OUTRAGEOUS.** CRD and HSE haven't even got the excuse of using Roundup to protect farmers' crops."

**Subject:**Concern submitted to HSE  
**Date:**Mon, 13 Nov 2017 12:45:07 +0000  
**From:**[noreplyconcerns@hse.gov.uk](mailto:noreplyconcerns@hse.gov.uk)  
**To:**rosemary.mason01@btinternet.com

Dear Dr Mason,

Thank you for your concern about glyphosate use in Swansea dated 27 October 2017. We have considered the information you have provided and consulted other colleagues in HSE. We will not be investigating as there doesn't appear to be any breach of legislation enforced by HSE. You have received HSE's comments and views about the product and its application in earlier correspondence.

Regards  
 Concerns Team  
 Health and Safety Executive

This is a no-reply email account. Replies will not be received at HSE

But evidence has been uncovered that the reassessments of glyphosate were done by the European Glyphosate Task Force, the glyphosate manufacturers. It is common knowledge that BfR and EFSA just took the assessments and 'cut and pasted' the papers that the GTF selected for them. The GTF had excluded scientific papers from Latin America (about cancers, birth defects, infertility, neurological degenerative conditions and changes to neurotransmitters in the foetus and adults). We told HSE about Iowa, where farms on which GM Roundup Ready corn and soy were grown were biological deserts. Our reserve and the surrounding area are also becoming 'biological deserts'. By 2018, there were no moths and a few butterflies that had no idea what flowers they were supposed to be feeding on and I had developed a progressive neurodegenerative disorder as a result of long-term exposure to glyphosate-based herbicides sprayed on Japanese Knotweed.

My neurologist has been convinced by the link between the disappearance of our wildlife and the 2018 paper: Glyphosate-based herbicides causing demyelination.<sup>2</sup>

### **Cancer Research UK was high-jacked by the Agrochemical Industry in 2010**

Michael Pragnell<sup>3</sup> former Chairman of Cancer Research UK (2010-2017), Founder of Syngenta and former Chairman of CropLife International was awarded a CBE in 2016 for services to cancer research. CropLife International was founded in 2001. As of 2015 CropLife International's member list includes the following 8 companies: [BASF](#), [Bayer CropScience](#), [Dow AgroSciences](#), [DuPont](#), [FMC Corp.](#), [Monsanto](#), [Sumitomo](#) and [Syngenta](#).

The CRUK website's comments about pesticides as a cause of cancer: *"For now, the evidence is not strong enough to give us any clear answers. But for individual pesticides, the evidence was either too weak to come to a conclusion, or only strong enough to suggest a "possible" effect. The scientific evidence on pesticides and cancer is still uncertain and more research is needed in this area."*<sup>4</sup>

### **The US EPA had known that glyphosate caused cancer since the 1991<sup>5</sup>**

Monsanto had known about it before that.<sup>6</sup> As time went on and there were increasing levels of weedkiller and other pesticides in non-organic food and the number of cancers were growing, the agrochemical industry needed to have the people to blame. As it happened, people eating weed killer in their diet became increasingly obese and developed diabetes.

### **Monsanto knew that glyphosate caused cancer but blamed the people for lifestyle choices. It also knew that Roundup destroyed biodiversity**

#### **CRUK invented causes of cancer and put the blame on the people for lifestyle choices**

Cancer Research UK colluded with the Chief Medical Officers, Public Health England, the Committee on Carcinogenicity and the media. Collectively, they blamed the people for their lifestyle choices: alcohol, obesity and smoking. But the corporations are responsible.

In 2011 CRUK started donating money (£450 million/year) to the Government's Strategy for UK Life Sciences and AstraZeneca (Syngenta's parent company) was providing 22 compounds to academic research to develop medicines in the UK. One Corporation promotes cancer and other diseases; the other Corporation tries to cure them with synthetic chemicals.

The Committee on Carcinogenicity of Chemicals in Food, Consumer Products and the Environment (COC) agreed with the CMOs and made the bold statement in support of industry:<sup>7</sup>

*"Overall, our findings support the view that drinking alcohol increases the risk of getting cancers of the mouth and throat, voice box, gullet, large bowel, liver, of breast cancer in women, and probably also of cancer of the pancreas."*

**A red-herring fabricated by industry and 'top' doctors in Britain: alcohol was claimed to be linked to seven forms of cancer: this 'alleged fact' was endlessly reinforced by the UK media until people in the UK were brainwashed**

<sup>2</sup> <https://hygeia-analytics.com/wp-content/uploads/2019/01/Szepanowski-Differential-impact-of-pure-glypho.pdf>

<sup>3</sup> [https://www.vinci.com/vinci.nsf/en/management-board-directors/pages/michael\\_pragnell.htm](https://www.vinci.com/vinci.nsf/en/management-board-directors/pages/michael_pragnell.htm)

<sup>4</sup> <http://www.cancerresearchuk.org/cancer-info/healthyliving/cancercontroversies/pesticides/>

<sup>5</sup> [https://www3.epa.gov/pesticides/chem\\_search/cleared\\_reviews/csr\\_PC-103601\\_30-Oct-91\\_265.pdf](https://www3.epa.gov/pesticides/chem_search/cleared_reviews/csr_PC-103601_30-Oct-91_265.pdf)

<sup>6</sup> <https://www.march-against-monsanto.com/monsanto-has-known-about-glyphosate-link-to-cancer-for-35-years/>

<sup>7</sup>

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/490584/COC\\_2015\\_S2\\_Alcohol\\_and\\_Cancer\\_statement\\_Final\\_version.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/490584/COC_2015_S2_Alcohol_and_Cancer_statement_Final_version.pdf)

An article was published in the *British Medical Journal* on 9 April 2016<sup>8</sup> reporting a survey commissioned by **Cancer Research UK** ‘People lack awareness of link between alcohol and cancer.’ The Report produced by researchers at the University of Sheffield ‘comes ahead of the consultation closing on how well new drinking guidelines proposed by the UK’s Chief Medical Officer in January 2016, are communicated.’<sup>9</sup>

“Almost 90 per cent of people in England don’t associate drinking alcohol with an increased risk of cancer” Alison Cox, **Cancer Research UK**’s Director of Cancer Prevention. She said: “The link between alcohol and cancer is now well established, and it’s not just heavy drinkers who are at risk. Drinking alcohol is linked to an increased risk of seven different cancers - liver, breast, bowel, mouth, throat, oesophageal (food pipe), laryngeal (voice box) - but when people were asked “which, if any, health conditions do you think can result from drinking too much alcohol?” just 13 per cent of adults mentioned cancer.” Dr Penny Buykx, a senior research fellow at The University of Sheffield and lead-author of the report, said: “We’ve shown that public awareness of the increased cancer risk from drinking alcohol remains worryingly low. People link drinking and liver cancer, but most still don’t realise that cancers including breast cancer, mouth and throat cancers and bowel cancer are also linked with alcohol, and that risks for some cancers go up even by drinking a small amount.” In fact, drinking alcohol and smoking decreased, so they had to think of something different.

### **By 2018 CRUK was claiming that obesity caused 13 different cancers**

Dr Margaret McCartney wrote in the BMJ on 17 March 2018:<sup>10</sup> Cancer patients should not be shamed: “The charity Cancer Research UK has gone large on its publicity campaign about obesity. Bus stops and advertising hoardings are replete with black text on a white background. The adverts invite us to fill in the blanks and spell out OBESITY, asking us to “Guess what is the biggest preventable cause of cancer after smoking.” The charity has also said, as part of the campaign, that “being overweight or obese causes 13 different types of cancer.”<sup>2</sup> But the vast majority of studies on this have found an association, not causation.<sup>3</sup>”

In the *Observer* and the *Guardian* 20 and 21 July 2019 it took out half-page advertisements.

**Obesity** (in huge letters) is a cause of cancer too. In a smaller box, it states Like smoking, obesity puts millions of adults at greater risk of cancer. And at the bottom, barely visible:

[cruk.org/EndJunkFoodAdsToKids](http://cruk.org/EndJunkFoodAdsToKids).

CRUK has paid for many adverts on ITV and Channel 4 describing how it looks after people with cancer and encouraged donations from the public. It claims to have spent £42 million on information and influencing in 2018. Its executives paid themselves between £60,000 and £250,000 in 2016. This was just about the highest pay of any charity.<sup>11</sup>

### **CRUK’s vision ‘is to bring forward the days when all cancers are cured’ is complete fabrication by the pesticides industry**

#### **Cancer Research UK is the world's leading charity dedicated to cancer research**

Michelle Mitchell OBE said: “It’s a privilege to be appointed as CEO of the world’s leading charity dedicated to beating cancer through research. Like many people, I have family who have been affected by cancer and I’m passionate about Cancer Research UK’s goal to speed up impact on survival.”<sup>12</sup>

<sup>8</sup> <http://www.bmj.com/content/353/bmj.i1881>

<sup>9</sup> <http://www.cancerresearchuk.org/about-us/cancer-news/press-release/2016-04-01-9-in-10-dont-link-alcohol-and-cancer>

<sup>10</sup> <https://www.bmj.com/content/360/bmj.k1139>

<sup>11</sup> <https://www.ten-percent.co.uk/10-percent-campaign/>

<sup>12</sup> <https://www.cancerresearchuk.org/about-us/cancer-news/press-release/2018-05-01-cancer-research-uk-appoints-new-chief-executive-1>

Press Release: “Cancer Research UK’s research is funded entirely by the public, whose donations support over 4,000 scientists, doctors and nurses across the UK. Several hundred of these scientists worked at Cancer Research UK’s London Research Institute at Lincoln’s Inn Fields and Clare Hall (LRI), which became part of the Crick on 1 April 2015. The LRI had an international reputation for cancer biology research and was the source of many significant breakthroughs.

Its vision is to bring forward the day when all cancers are cured.”

Has Michelle Mitchell seen the numbers of cancers in the UK?

**Each year there are steady increases in the numbers of new cancers in the UK and increases in deaths from the same cancers, with no treatments making any difference to the numbers.**

In the UK there were 13,605 new cases of Non-Hodgkin Lymphoma in 2015 (and 4,920 deaths in 2016)<sup>13</sup>: there were 41,804 new cases of bowel cancer in 2015 (and 16,384 deaths in 2016); 12,547 new cases of kidney cancer in 2015 (and 4,619 deaths in 2016); 5,736 new cases of liver cancer in 2015 (5,417 deaths in 2016); 15,906 new cases of melanoma in 2015 (2,285 deaths in 2016); 3,528 new cases of thyroid cancer in 2015 (382 deaths in 2016); 10,171 new cases of bladder cancer in 2015 (5,383 deaths in 2016); 8,984 new cases of uterine cancer in 2015 (2,360 deaths in 2016); 7,270 cases of ovarian cancer in 2015 (4,227 deaths in 2016); 9,900 new cases of leukaemia in 2015 (4,712 deaths in 2016); 55,122 new cases of invasive breast cancer in 2015 (11,563 deaths in 2016); 47,151 new cases of prostate cancer in 2015 (11,631 deaths in 2016); 9,211 new cases of oesophageal cancer in 2015 (8,004 deaths in 2016); and 5,540 new cases of myeloma in 2015 (3,079 deaths in 2016); 2,288 new cases of testicular cancer in 2015 (57 deaths in 2016); 9,921 new cases of pancreatic cancer in 2015 (9,263 deaths in 2016); 11,432 new cases of brain cancer in 2015 (5,250 deaths in 2016); 46,388 new cases of lung cancer in 2015 (and 35,620 deaths in 2016). In the US in 2014 there were 24,050 new cases of myeloma.

**The Francis Crick Institute with its ‘world class resources’ is failing to improve people’s lives with its treatments, but is definitely strengthening the economy of the pesticides industry and the pharmaceutical industry**

Report: “The Francis Crick Institute is a biomedical discovery institute dedicated to understanding the fundamental biology underlying health and disease. Its work is helping to understand why disease develops and to translate discoveries into new ways to prevent, diagnose and treat illnesses such as cancer, heart disease, stroke, infections, and neurodegenerative diseases.”<sup>14</sup>

An independent organisation, its founding partners are the Medical Research Council (MRC), **Cancer Research UK**, Wellcome, UCL (University College London), Imperial College London and King’s College London. The Crick was formed in 2015, and in 2016 it moved into a brand-new state-of-the-art building in central London which brings together 1500 scientists and support staff working collaboratively across disciplines, making it the biggest biomedical research facility under a single roof in Europe. The Francis Crick Institute will be world-class with a strong national role. Its distinctive vision for excellence includes commitments to collaboration; to developing emerging talent and exporting it to the rest of the UK; to public engagement; and to helping turn discoveries into treatments as quickly as possible to improve lives and strengthen the economy.”

<sup>13</sup> <https://www.cancerresearchuk.org/health-professional/cancer-statistics/statistics-by-cancer-type/non-hodgkin-lymphoma>

<sup>14</sup> <https://www.crick.ac.uk/about-us/>

## **Weedkiller was sprayed on crops pre-harvest from 1980; as suggested to farmers by Monsanto scientists**

**ADAS recommended pre-harvest crop spraying with Roundup® in 1980<sup>15</sup> and spraying on grassland in 1985. Researches showed two Monsanto scientists wrote the first papers (without declaring it)**

In 1980 UK Agricultural Development and Advisory Services (the science and advisory branch of Ministry of Agriculture, Fisheries and Food (MAFF) but now privatised) was recommending that arable farmers use pre-harvest application of glyphosate on cereal crops. M.G. O’Keeffe, a Monsanto scientist<sup>16</sup> wrote three articles about it, the first at a Crop Protection conference.<sup>17</sup> They do not appear to have been peer-reviewed. By 1985 ADAS was advocating the use of glyphosate on grassland. They declared it to be good practice to graze the grass or preserve it as hay or silage after treatment.<sup>18</sup> However, the main author of the paper was another Monsanto scientist, Colin D Stride.<sup>19</sup> He later joined Exponent®, a firm that provides services for industry, governments and for EU regulatory bodies.

In a 4-month project starting in the UK in January 2007: Pre-harvest glyphosate for weed control and as a harvest aid in cereals<sup>20</sup> the authors stated in their introduction:

*“Concern over residues, as expressed by the Food Safety Authority Report, appears to relate to the incidence of residues rather than to the levels of the residues. Data from Monsanto and Cessna et al. (1994 & 2002) suggest that the level of residues is associated with dose but that even the lower doses used for harvest aid will leave detectable levels at harvest. Hence, any initiative to reduce the incidence of residues must be to reduce the proportion of the crop sprayed rather than to reduce the dose of the individual applications.”* However, the authors do not appear to have performed any glyphosate residue measurements.

**The British public is unaware that glyphosate (and other pesticide) residues are present in food despite the fact that pre-harvest spraying began in 1980. Defra Expert Committee on Pesticide Residues in Food:<sup>21</sup> Monsanto is responsible for humans and animals having glyphosate residues in their bodies: it is in all staple, non-organic foods**

The results from monitoring of Pesticide Residues in Food (PRiF) have been published quarterly in the UK since 2000, but pre-harvest application to crops had already been authorised 20 years before. Bread and breakfast cereals are staple foods but there are no maximum residue levels (MRLs) for bread or breakfast cereals. Residues in bread are tested twice a year.

<sup>15</sup> <http://www.hgca.com/media/185527/is02-pre-harvest-glyphosate-application-to-wheat-and-barley.pdf>

<sup>16</sup>

[https://books.google.co.uk/books?id=objYBAAAQBAJ&pg=PA555&lpg=PA555&dq=Monsanto+O%27Keeffe+M+G&source=bl&ots=3k7GWMRWZ3&sig=wg0ZhiNFMTY86cNp\\_cP3jV4Dz3A&hl=en&sa=X&ei=Twz-VPmWA8mBU93GgqP&ved=OCEkQ6AEwBg#v=onepage&q=Monsanto%20O'Keeffe%20MG&f=false](https://books.google.co.uk/books?id=objYBAAAQBAJ&pg=PA555&lpg=PA555&dq=Monsanto+O%27Keeffe+M+G&source=bl&ots=3k7GWMRWZ3&sig=wg0ZhiNFMTY86cNp_cP3jV4Dz3A&hl=en&sa=X&ei=Twz-VPmWA8mBU93GgqP&ved=OCEkQ6AEwBg#v=onepage&q=Monsanto%20O'Keeffe%20MG&f=false) Chemical Manipulation of Crop Growth and Development Proceedings of Previous Easter Schools in Agricultural Science by J. S. McLaren

<sup>17</sup> O’Keeffe MG. The control of *Agropyron repens* and broad-leaved weeds pre-harvest of wheat and barley with the isopropylamine salt of glyphosate; 1980. pp. 53–60. Proceedings of British Crop Protection Conference-Weeds.

<sup>18</sup> Stride CD, Edwards RV, Seddon JC. Sward destruction by application of glyphosate before cutting or grazing; 1985. pp. 771–778. British Crop Protection Conference – Weeds 7B–6.

<sup>19</sup> [http://www.exponent.com/files/Attorney/2f28f368-0f2c-48d0-91c2-60589cce38f1/Presentation/ceExpertCVUpload/stride,c\\_full.pdf](http://www.exponent.com/files/Attorney/2f28f368-0f2c-48d0-91c2-60589cce38f1/Presentation/ceExpertCVUpload/stride,c_full.pdf)

<sup>20</sup> [http://archive.hgca.com/publications/documents/cropresearch/RR65\\_Final\\_Research\\_Review.pdf](http://archive.hgca.com/publications/documents/cropresearch/RR65_Final_Research_Review.pdf)

<sup>21</sup> <http://www.pesticides.gov.uk/guidance/industries/pesticides/advisory-groups/PRiF/about-PRiF>

e.g. 2002 3<sup>rd</sup> Quarter: Comments from PRiF: “Residues of chlormequat,<sup>22</sup> glyphosate and pirimiphos-methyl<sup>23</sup> were found (in bread). These pesticides are commonly used on cereal crops, and residues have been found in other cereal products, therefore these findings are not unexpected. None of the residues found were of concern for consumer health.”

2011 3<sup>rd</sup>/4<sup>th</sup> Quarters for Lentils: Comments: “Sixteen samples of lentils contained glyphosate above the MRL. A new higher level of glyphosate is expected to come into force in summer 2012. None of the residues detected in this survey would be above the new proposed MRL.”

When the CRD Head of Regulatory Policy replied 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 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.<sup>24</sup>

### **Most UK farmers who manage ‘75% of UK land’ are drowning their crops in pesticides**

The National Farmers’ Union (NFU), the Crop Protection Association (CPA) and the Agricultural Industries Confederation (AIC) combine to lobby the EU not to restrict the 320+ pesticides available to them. The publication is called: **HEALTHY HARVEST**.<sup>25</sup> The countries that have even lower Biodiversity Intactness Indices are similarly working with the Agrochemical Corporations. These are the Republic of Ireland and the USA.

### **Department of Health’s School Fruit and Vegetable Scheme (SFVS) has residues of 123 different pesticides analysed by PAN-UK**

Pesticide Action Network UK’s analysis of the last 12 years of residue data published by the Expert Committee on Pesticide Residues in Food (PRiF) shows that there are unacceptable levels of pesticides present in the food provided through the Department of Health’s School Fruit and Vegetable Scheme (SFVS).<sup>26</sup> Residues of 123 different pesticides were found, some of which are linked to serious health problems such as cancer and disruption of the hormone system. In many cases, multiple residues were found on the produce. This is another area of serious concern as the scientific community has little understanding about the complex interaction of different chemicals in what is termed the ‘cocktail’ effect. We have also found that the levels of residues contained on SFVS produce are higher than those in produce tested under the national residue testing scheme (mainstream produce found on supermarket shelves).

### **In 2018, shockingly high levels of weedkiller were found in UK oat-based cereals**

We read an article in the UK *Guardian* about breakfast cereals in the US having weed killer in oat-based cereals. The UK *Guardian* reported: “There was no indication that the claims related to products sold outside the US.” In view of this statement by the *Guardian*, we sent samples of four oat-based breakfast cereals marketed for children in the UK to the Health Research Institute,

<sup>22</sup> Chlormequat, a plant growth regulator was present consistently throughout.

<sup>23</sup> pirimiphos-methyl, is an organophosphate insecticide for use in storage. The approval was revoked on 24/03/2011, but it was only finally banned 31/03/2013, presumably to allow stocks to be used up.

<sup>24</sup> <http://www.efsa.europa.eu/en/efsajournal/pub/2550.htm>

<sup>25</sup> Healthy Harvest: The impact of losing plant protection products on UK food and plant production.

<http://www.nfuonline.com/assets/30597>

<sup>26</sup> <http://www.pan-uk.org/food-for-thought/>

Fairfield, Iowa, an accredited laboratory for glyphosate testing. Kellogg No added sugar granola with apricot and pumpkin seeds Barley Flakes 27% Oats 23% Rye 13% Wheat flour Oat flour; Quaker Oat so Simple: Quaker Whole Grain Rolled Oats; Weetabix Oatibix 100% wholegrain oats; Nestle Multigrain Cheerios: Whole Grain Oat Flour 29.6% Whole Grain Wheat 29.6% Whole Grain Barley Flour 17.9% Whole Grain Corn Flour 2.1% Whole Grain Rice Flour 2.1%.

Dr Fagan the Director says: “These results are consistently concerning. The levels consumed in a single daily helping of any one of these cereals, even the one with the lowest level of contamination, is sufficient to put the person’s glyphosate levels above the levels that cause fatty liver disease in rats (and likely in people).”<sup>27</sup>

Type of breakfast cereal marketed for children Product description	Glyphosate level ng/g	AMPA ng/g	Effective glyphosate level ng/g
Kelloggs No added sugar granola with Apricot & pumpkin seeds	499.90	ND	499.90
Quaker/Oat So simple/Original Microwaveable Oats	464.23	24.04	500.28
Weetibix Oatibix 100% wholegrain oats	318.85	16.96	344.28
Nestle Multigrain Cheerios Whole Grain Oat Flour 29.6% Whole Grain Wheat 29.6% Whole Grain Barley Flour 17.9% Whole Grain Corn Flour 2.1% Whole Grain Rice Flour 2.1%.	137.29	ND	137.29

The *Guardian* didn’t publish the shocking figures, but the *Daily Mail* did.

### **Evidence that obesity is as a result of residues of weedkiller in non-organic food**

The **1970 British Cohort Study** (BCS70) is a continuing, multi-disciplinary longitudinal study monitoring the development of more than 17,000 babies born in the UK during the week of 5–11 April 1970. Since the birth survey in 1970, there have been eight sweeps of all cohort members at ages 5, 10, 16, 26, 30, 34, 38 and 42. The Centre for Longitudinal Studies (CLS) based at the Institute of Education University of London published their latest report on 9 November 2013 (6 years ago).<sup>28</sup>

Their key findings of the cohort at age 42 were that:

- The generation born in 1970 is considerably more likely to be overweight or obese than those born 12 years earlier were at the same age.
- Men born in 1970 are far more likely to be overweight than women.

### **The programmes on July 20 2019 celebrating the 50<sup>th</sup> anniversary since the moon-landings**

Neil Armstrong and the other moon-walkers show a generation in the 1960s that were slim. The programmes also show the moon-walkers now. In general, most men have fat stomachs with bellies hanging over their trouser belts. Neil Armstrong had who died after cardiac surgery in 2012 was also fat. Some people in the UK and the US are grossly obese, but they don’t seem to be aware of it.

### **Proof that obesity is a problem related to glyphosate: a study showed that, by 2025, the UK will have the highest obesity rates among both men and women in Europe, at 38%: in contrast in France women have had virtually no increase in BMI over 40 years**

A study on obesity published in the *Lancet* in March 2016 says: “About a fifth of all adults around the world and a third of those in the UK will be obese by 2025, with potentially disastrous consequences

<sup>27</sup> <https://www.dailymail.co.uk/health/article-6315209/Revealed-UK-cereals-contain-potentially-harmful-amounts-WEEDKILLER.html>

<sup>28</sup> [Overweight and obesity in mid-life: Evidence from the 1970 British Cohort Study at age 42](#)

for their health”.<sup>29</sup> The *Lancet* Study says there is zero chance that the world can meet the target set by the UN for halting the climbing obesity rate by 2025.

“Over the past 40 years, we have changed from a world in which underweight prevalence was more than double that of obesity, to one in which more people are obese than underweight,” said senior author Prof Majid Ezzati from the School of Public Health at Imperial College London. “The English-speaking world is particularly badly affected. **The UK will have the highest obesity among both men and women in Europe, at 38%.**

In contrast: “Against the trend of steadily rising weight, women in some countries had virtually no increase in BMI over the 40 years – in Singapore, Japan, and a few European countries including Czech Republic, Belgium, **France**, and Switzerland.”

**A Monsanto scientist claimed that glyphosate was not metabolised in the body but excreted unchanged. The UN’s joint FAO/WHO assessment showed that <sup>14</sup>C labelled glyphosate is distributed to every organ of the body**

**Professor Alan Boobis , who chaired the UN’s joint FAO/WHO meeting in 2016 on glyphosate claimed he had no conflicts of interest, but *The Guardian’s* European Environment Editor showed that his organisation had received industry money**

Professor Alan Boobis, who claimed he had no conflicts of interest, is Vice-President of the International Life Science Institute (ILSI) Europe, an organisation that had received money from both Monsanto and CropLife International. The following report was from *Guardian* journalist Arthur Neslen.<sup>30</sup> “A UN panel that on Tuesday ruled that glyphosate was *probably not carcinogenic to humans* has now become embroiled in a bitter row about potential conflicts of interests. It has emerged that an institute co-run by the chairman of the UN’s joint meeting on pesticide residues (JMPR) received a six-figure donation from Monsanto, which uses the substance as a core ingredient in its bestselling Roundup weedkiller. *Professor Alan Boobis*, who chaired the UN’s joint FAO/WHO meeting on glyphosate, also works as the Vice-president of the International Life Science Institute (ILSI) Europe. The co-chair of the sessions was Professor Angelo Moretto, a board member of ILSI’s Health and Environmental Services Institute, and of its *Risk21 steering group* too, which Boobis also co-chairs. In 2012, the ILSI group took a \$500,000 (£344,234) donation from Monsanto and a \$528,500 donation from the industry group Croplife International, which represents *Monsanto, Dow, Syngenta and others*, according to documents obtained by the US right to know campaign.”

**Joint Meeting of the FAO Panel of Experts on Pesticide Residues in Food and the Environment and the WHO Core Assessment Group Rome, Italy, 20–29 September 2004**<sup>31</sup>

When Glyphosate was reassessed in 2004, Professor Alan Boobis was also Chairman of the UN’s JMPR meeting on pesticide residues.

The presentation on re-assessment of glyphosate data was done by two members of the German Rapporteur Member State Federal Institute of Risk Assessment (BfR) Dr Rudolf Pfeil and Dr Lars Niemann and two other members of the BfR were present Dr Roland Solecki and Dr Ursula Banasiak. Why did the BfR declare beforehand that since they carried out the original work it would be improper for them to be involved in the JMPR discussions?

<sup>29</sup> <http://www.theguardian.com/society/2016/mar/31/one-fifth-of-worlds-adults-will-be-obese-by-2025-study-predicts>

<sup>30</sup> <https://www.theguardian.com/environment/2016/may/17/unwho-panel-in-conflict-of-interest-row-over-glyphosates-cancer-risk>

<sup>31</sup>

[https://apps.who.int/iris/bitstream/handle/10665/43624/9241665203\\_eng.pdf;jsessionid=B0AAD3975D65BB30FFFE902DD40DF27C?sequence=1](https://apps.who.int/iris/bitstream/handle/10665/43624/9241665203_eng.pdf;jsessionid=B0AAD3975D65BB30FFFE902DD40DF27C?sequence=1)

On page 98, the Ridley and Mirly paper on <sup>14</sup>C labelled glyphosate showed it was distributed to every organ in the body. So why did [Dan Goldstein](#), Senior Science Fellow and Lead, Medical Sciences and Outreach, Monsanto on Friday, 12/20/2013 3:16 pm: claim: *"If ingested, glyphosate is excreted rapidly, does not accumulate in body fat or tissues, and does not undergo metabolism in humans. Rather, it is excreted unchanged in the urine (EU Review Report of the active substance glyphosate, 2002)<sup>32</sup> and refer back to the 2002 (sic) assessment?*

Page 98 Table 3. Mean tissue concentration of radioactivity (ppm) at 168 h in rats given <sup>14</sup>C-labelled glyphosate as single or repeated doses. **Glyphosate was present in whole blood, liver, brain, kidney, spleen, lung, heart, testes/ovary, stomach, small intestine, colon, bone, bone marrow, abdominal muscles, shoulder muscles and the eye.**

Page 125 The ophthalmic examination before study termination revealed a statistically significant difference ( $p < 0.05$ ) between the incidences of cataractous lens changes in males in the control group and in the group receiving the highest dose (none out of 15 compared with five out of 20). The occurrence of cataractous lens changes in males at the lowest and intermediate doses, as well as in all treated groups of females, were comparable to that of their respective controls. The observed incidence for this finding of 25% for male CD rats at the highest dose was within the range (0–33%) observed in previously conducted studies at this laboratory, but a treatment-related impact could not be excluded. An independent pathologist's examination confirmed a statistically significant increase ( $p < 0.05$ ) in the incidence of cataractous lens changes in males at the highest dose (one out of 14 compared with eight out of 19) and concluded that there appeared to be a treatment-related occurrence of lens changes affecting males at the highest dose. Histological examination of the eyes at study termination revealed the incidences of cataract and/or lens fibre degeneration (Table 19). The results of histopathology also suggested that there was an increase in cataractous lesions in male rats at 20 000 ppm, although the difference in incidences in the control group and at the lowest and intermediate doses was less pronounced than suggested by ophthalmoscopy. (Stout and Ruecker 1990).

#### Conclusions of the UN's JPMR meeting

Page 158 *In view of the absence of a carcinogenic potential in animals and the lack of genotoxicity in standard tests, the Meeting concluded that glyphosate is unlikely to pose a carcinogenic risk to humans.*

Page 159 *The Meeting concluded that glyphosate is not teratogenic. The Meeting concluded that the existing database on glyphosate was adequate to characterize the potential hazards to fetuses, infants, and children.*

*On the basis of the new toxicological data, the present Joint Meeting concluded that AMPA is of no greater toxicological concern than its parent compound, thus confirming the conclusion of the 1997 JMPR.*

**In 1994 the Joint FAO/WHO/JMPR Panel had granted Monsanto increased Maximum Residue Levels (MRLs) for glyphosate on soya (from 5 mg/kg to 20 mg/kg) and soya bean fodder (from 20 mg/kg to 200 mg/kg).<sup>33</sup>**

<sup>32</sup> [http://ec.europa.eu/food/plant/protection/evaluation/existactive/list1\\_glyphosate\\_en.pdf](http://ec.europa.eu/food/plant/protection/evaluation/existactive/list1_glyphosate_en.pdf)

<sup>33</sup>

[http://www.fao.org/fileadmin/templates/agphome/documents/Pests\\_Pesticides/JMPR/Evaluation94/glyphos.pdf](http://www.fao.org/fileadmin/templates/agphome/documents/Pests_Pesticides/JMPR/Evaluation94/glyphos.pdf)

## British women live shorter lives than most other Europeans and nearly 20 years in poor health

Spanish women live the longest, with UK longevity ranked 17th out of 28 EU nations, according to Public Health England's annual health profile<sup>34</sup>

*"There is no reason why we shouldn't be as healthy as anywhere in Europe," said Prof John Newton, director of health improvement at PHE.<sup>35</sup> "Many of the causes of chronic, long-term diseases in the UK which shorten lives are preventable. **Obesity** is causing a big surge in the numbers of people developing type 2 diabetes. The report shows the numbers with diabetes are expected to rise swiftly, from just under four million last year to nearly five million in 2035. Along with alcohol, obesity is also one of the factors behind the rise in breast cancer. Apart from the human cost, the bill for the NHS will be huge... The list of the most common site-specific cancers remained unchanged from 2015 in both sexes. Lung cancer, colorectal and anal cancer, and leukaemia and lymphomas were all in the top ten leading causes of death in 2016... Prostate cancer and breast cancer remained amongst the top ten leading causes of death for males and females respectively, both ranked seventh, the same as in 2015. Lung cancer deaths remained the third most common cause of death for males and sixth most common for females in 2016. There has also been an increase in the death rate from lung cancer (8%), kidney disease and other diseases of the urinary system (38%) and chronic lower respiratory disease (18%). When deaths from all cancers are grouped together, cancer accounted for 25.6% of all deaths in females and 30.3% of all deaths in males in 2016. This would make it the leading cause, in 2016, for both sexes. The leading cause of death for women is dementia and Alzheimer's disease, responsible for 15.8% of deaths, with heart disease second at 8.3%. There has been an increase in the death rate from dementia and Alzheimer's of more than 60% and deaths from liver disease have increased by 12%.*

*Women in 2014-16 were spending nearly 20 years of their life in poor health (19.3 years), while men spent just over 16 years in poor health, according to data from the Office for National Statistics included in the report. The leading cause of poor health, responsible for more than 22% of the pain and suffering, is low back and neck pain, which can be caused by a number of things, including injury and rheumatoid arthritis. After that come skin diseases such as acne and psoriasis, says the report. Third for men is sight and hearing loss, while for women it is migraine. Fourth for both is depressive disorders. Long-term conditions such as diabetes, high blood pressure and cancers underlie some of these problems."*

### The UK media have failed to report the US Court cases in which plaintiffs won against Monsanto for deliberately concealing that Roundup caused cancer

**Third trial and largest fine against Monsanto to a couple over Roundup: for the first time the Attorneys were able to reveal Monsanto's criminal strategy for keeping Roundup on the market** A **California** jury has ordered Monsanto to pay more than \$2bn to a couple that got cancer after using its weedkiller, marking the third and largest verdict against the company over Roundup.<sup>36</sup> A jury in Oakland ruled Monday that **Monsanto**, now owned by the German pharmaceutical corporation Bayer, was liable for the non-Hodgkin's lymphoma (NHL) cancer of Alva and Alberta Pilliod. The jury ordered the company to pay \$1bn in damages to each of them, and more than \$55m total in compensatory damages (13/05/2019).

<sup>34</sup>

<http://click.mail.theguardian.com/?qs=bd4bb2980cde506285bbd7433f46e1dcb58fad37ae94d5a5d26dba313aef8ec8b4af965a3c4068bc7770cb3208949b39>

<sup>35</sup> <https://www.gov.uk/government/publications/health-profile-for-england-2018/chapter-2-trends-in-mortality>

<sup>36</sup> <https://www.theguardian.com/business/2019/may/13/monsanto-cancer-trial-bayer-roundup-couple>

**Breaking News: Monsanto hit with \$2 billion verdict in 3<sup>rd</sup> Roundup trial<sup>37</sup>**

Law360 (May 13, 2019, 5:04 pm EDT). Excerpts: Other experts called by the Pilliods testified that the US EPA approved Roundup, based on fraudulent studies by Industrial Bio-test Laboratories. They said the company kept selling the product, even after the fraud was exposed, and refused for decades to conduct certain studies of its Roundup formula, despite requests from the EPA and its own toxicologist. During closings, the Pilliod's counsel, Brent Wisner, argued that Monsanto spent decades suppressing science linking its product to cancer, by ghost-writing academic articles and feeding the EPA "bad science". He asked the jury to 'punish' Monsanto with a \$1 billion punitive damages award. On Monday 13<sup>th</sup> May the jury sided with the Pilliods and found Monsanto liable for failure to warn claims, design defect claims, negligence claims and negligent failure to warn claims.

**On 28/08/2018 Robert F Kennedy Jr. one of the US Attorney's fighting Bayer, said: Bayer Needs More Than an Aspirin to Cure Its Monsanto-Sized Headache<sup>38</sup>**

*"In a special telephone meeting on Thursday, August 23, Bayer AG's CEO Werner Bauman tried to reassure the German conglomerate's principal shareholders who were concerned about the recent drop in the company's stock. Bayer's stock fell dramatically after an unfavorable verdict against Bayer's St. Louis subsidiary, Monsanto.*

*Bauman expressed his confidence in Monsanto and predicted a sunny future for its flagship herbicide, Roundup. He told his top-tier investors that Bayer had performed an adequate due-diligence on Monsanto before purchasing the troubled company for \$66 billion this past June. At the time of its purchase, Monsanto told its German suitors that a \$270-million set-aside would cover all its outstanding liabilities arising from Monsanto's 5,000 Roundup cancer lawsuits.*

*Bauman did concede to anxious shareholders that Monsanto had withheld internal papers relevant to the case. Bayer never saw those internal Monsanto documents prior to the purchase.*

*It's no surprise that Monsanto kept secrets from Bayer. Johnson's jury heard evidence that for four decades Monsanto maneuvered to conceal Roundup's carcinogenicity by capturing regulatory agencies, corrupting public officials, bribing scientists and engaging in scientific fraud to delay its day of reckoning. The jury found that these activities constituted "malice, fraud and oppression" warranting \$250 million in punitive damages.*

*I am one of several attorneys representing, collectively, now some 8,000 clients with similar cases. I attended the two-month trial and worked with the trial team led by two young and exceptionally gifted lawyers, Brent Wisner of Baum Hedlund Aristei & Goldman and Dave Dickens of The Miller Firm. For Bayer the worst is yet to come.*

*Despite Monsanto's efforts, the science linking glyphosate—Roundup's active ingredient—to non-Hodgkin's lymphoma has passed the critical inflection point. European nations are moving to ban or restrict the chemical, and California regulators and courts have ordered Monsanto to warn consumers of Roundup's carcinogenicity at all points of sale. Both federal and state courts across the country have agreed that the question can be sent to juries. Hundreds of new inquiries have flooded our offices since the Johnson verdict.*

*Perhaps more ominously for Bayer, Monsanto also faces cascading scientific evidence linking glyphosate to a constellation of other injuries that have become prevalent since its introduction, including obesity, depression, Alzheimer's, ADHD, autism, multiple sclerosis, Parkinson's, kidney disease, and inflammatory bowel disease, brain, breast and prostate cancer, miscarriage, birth defects and declining sperm counts. Strong science suggests glyphosate is the culprit in the exploding epidemics of celiac disease, colitis, gluten sensitivities, diabetes and non-alcoholic liver cancer which, for the first time, is attacking children as young as 10.*

*Researchers peg glyphosate as a potent endocrine disruptor, which interferes with sexual development in children. The chemical compound is certainly a chelator that removes important minerals from the body, including iron, magnesium, zinc, selenium and molybdenum.*

<sup>37</sup> <https://www.law360.com>

<sup>38</sup> <https://www.organicconsumers.org/blog/kennedy-monsanto-roundup-verdict-bayer-stock>

Roundup [disrupts the microbiome](#) destroying beneficial bacteria in the human gut and triggering brain inflammation and other ill effects.

The public's growing concerns with Roundup are, in part, due to Monsanto's overreaching. For two decades following its licensing in 1974, farmers and gardeners used Roundup as a conventional weedkiller. After Monsanto's introduction of Roundup Ready seeds in the 1990s, farmers began aerial spraying of the herbicide on entire fields, including newly planted corn, canola and soy genetically altered to thrive in the toxic mist that killed all neighboring weeds.

Then, around 2006, Monsanto started marketing Roundup as a [desiccant](#) to dry up oats and wheat immediately before harvest. For the first time, farmers were spraying the chemical directly on food. Roundup sales rose dramatically to 300 million pounds annually in the U.S., with farmers spraying enough to cover every tillable acre in America with a gallon of Roundup.

Glyphosate now accounts for about [50% of all herbicide use](#) in the U.S. About [75% of glyphosate use](#) has occurred since 2006, with [the global glyphosate market](#) projected to reach \$11.74 billion by 2023. Never in history has a chemical been [used](#) so pervasively. Glyphosate is in our air, water, plants, animals, grains, vegetables and meats. It's in beer and wine, children's [breakfast cereal and snack bars](#) and mother's breast milk. It's even in our vaccines.

### Children among the cancer victims suing Monsanto and Bayer

A 12-year-old boy suffering from cancer is among the newest plaintiffs taking on Monsanto and its German owner Bayer AG in growing litigation over the safety of Roundup herbicides and Monsanto's handling of scientific concerns about the products.<sup>39</sup>

Lawyers for Jake Bellah were in court Monday in Lake County Superior Court in Lakeport, California arguing that Bellah's young age and diagnosis of non-Hodgkin lymphoma (NHL) qualified him for "trial preference," or a speedy trial. [In their motion](#), lawyers for the Baum Hedlund law firm of Los Angeles asked for a trial that would begin before the end of this year, within 120 days after a judge's order if their motion is granted. Monsanto lawyers opposed the request, arguing that the company would need more time to prepare a defense given the unusual scientific issues of surrounding alleged causation of cancer in a child. The four plaintiffs who have already had trials against Monsanto were all adults diagnosed with non-Hodgkin lymphoma, and all were victorious. Bellah would likely be the first case of a child with cancer to challenge Monsanto before a jury.

Lawyers representing Bellah said the child was exposed to Monsanto's glyphosate-based herbicide products repeatedly over many years as he played in his family's yard and around their garden area where his father frequently sprayed the chemicals. Bellah developed B-cell lymphoma and has been hospitalized and treated with chemotherapy and is currently in remission, according to Pedram Esfandiary, one of the family's attorneys.

### Monsanto emails released show Roundup was kept on the market by capturing regulatory agencies, corrupting public officials, bribing scientists and engaging in scientific fraud

#### Monsanto emails showed that scientists knew that 'the formulated product does the damage'<sup>40</sup>

This document is an email correspondence between Drs. William Heydens and Donna Farmer, wherein the two discuss various studies which observed adverse effects by the formulated Roundup product. Specifically, Dr. Farmer acknowledges: "[t]he interest point is glyphosate all basically [sic] had no effect the formulated product did – does this point us to the coformulants – surfactants? [sic]" at \*2. Dr. Heydens also admits, after discussing with Monsanto consultant John Desesso, that "we are in pretty good shape with glyphosate but vulnerable with surfactants. . . What I've been hearing

<sup>39</sup> <https://usrtk.org/monsanto-roundup-trial-tacker/sick-children-among-cancer-victims-suing-monsanto-over-roundup/>

<sup>40</sup> <https://www.baumhedlundlaw.com/toxic-tort-law/monsanto-roundup-lawsuit/monsanto-secret-documents-page-six/>

*from you is that this continues to be the case with these studies – Glyphosate is OK but the formulated product (and thus the surfactant) does the damage.” at \*1.*

One of the Court Documents released was an email from Donna Farmer, Monsanto Senior Toxicologist: *“The terms glyphosate and Roundup cannot be used interchangeably nor can you use “Roundup” for all glyphosate-based herbicides any more. For example, you cannot say that Roundup is not a carcinogen...we have not done the necessary testing on the formulation to make that statement.”*

Donna Farmer’s 1/11/2017 deposition details Monsanto’s reaction to Dr. James Parry’s review of glyphosate. Specifically, the deposition covers Monsanto’s reluctance to conduct studies suggested by Dr. Parry after being unhappy with Parry’s conclusions. Likewise, it appears that Monsanto never submitted Dr. Parry’s work on glyphosate to the US EPA, even though internal emails describe him as a renowned expert.

**Key documents that were uncovered by the Courts are here<sup>41</sup>**

#### **Jess Rowlands US EPA allegedly bragged he could kill off the cancer risk**

It included emails in which an [Environmental Protection Agency](#) official Jess Rowlands who was in charge of evaluating the cancer risk of [Monsanto Co.](#)’s Roundup allegedly bragged to a company executive that he deserved a medal if he could kill another agency’s investigation into the herbicide’s key chemical.

#### **Monsanto sought academics to sign a ghost-written Report**

They cited an email from a Monsanto executive proposing to ghost-write parts of the 2013 report, saying, *“we would be keeping the cost down by us doing the writing”* while researchers *“would just edit & sign their names so to speak.”*

#### **A letter written by the late Marion Copley US EPA toxicologist to her colleague Jess Rowland <sup>42</sup>**

It’s been four years since Marion Copley, a toxicologist who had worked for 30 years for the EPA, wrote this letter to her then-colleague, Jess Rowland, accusing him of conniving with Monsanto to bury the agency’s own hard scientific evidence that it is *“essentially certain”* that glyphosate, the key ingredient in Monsanto’s Roundup weed killer, causes cancer. The date of the letter comes after Copley left the EPA in 2012 and shortly before she died from breast cancer at the age of 66 in January 2014. She accuses Rowland of having *“intimidated staff”* to change reports to favor industry, and writes that research on glyphosate, the key ingredient in Monsanto’s Roundup, shows the pesticide should be categorized as a *“probable human carcinogen.”*

*“Jess,*

*Since I left the agency with cancer [breast] I have studied the tumor process extensively and I have some mechanism comments which may be very valuable to CARC based on my decades of pathology experience. Glyphosate was originally designed as a chelating agent and I strongly believe that is the identical process involved in tumor formation.”*

In a 1-page letter Dr Copley makes 14 observations about chelators and/or glyphosate, including that they are endocrine disruptors, suppress the immune system, damage the kidneys or pancreas which can lead to clinical chemistry changes that favor tumor growth; glyphosate kills bacteria in the gut, the gastrointestinal system is 80% of the immune system making the body susceptible to tumors.

She goes on to say: ***“It is essentially certain that glyphosate causes cancer.”***

Dr Copley ends with the statement: *“I have cancer, and I don’t want these serious issues in HED [EPA’s Health Effects Division] to go unaddressed before I go to my grave. I have done my duty.”*

<sup>41</sup> <https://usrtk.org/pesticides/mdl-monsanto-glyphosate-cancer-case-key-documents-analysis/>

<sup>42</sup> <https://www.organicconsumers.org/sites/default/files/marioncopleyletter.pdf>

Marion Copley  
March 4, 2013"

### **Glyphosate causes serious multi-generational health damage to rats**

Washington State University (WSU) researchers have found a variety of diseases and other health problems in the second- and third-generation offspring of rats exposed to glyphosate, the world's most used weed killer. In the first study of its kind, the researchers saw descendants of exposed rats developing prostate, kidney and ovarian diseases, obesity and birth abnormalities.<sup>43</sup>

Michael Skinner, a WSU professor of biological sciences, and his colleagues exposed pregnant rats to the herbicide between their eighth and 14th days of gestation. The dose—half the amount expected to show no adverse effect—produced no apparent ill effects on either the parents or the first generation of offspring.

But writing in the journal *Scientific Reports*, the researchers say they saw “dramatic increases” in several pathologies affecting the second and third generations. The second generation had “significant increases” in testis, ovary and mammary gland diseases, as well as obesity. In third-generation males, the researchers saw a 30 percent increase in prostate disease – three times that of a control population. The third generation of females had a 40 percent increase in kidney disease, or four times that of the controls.

More than one-third of the second-generation mothers had unsuccessful pregnancies, with most of those affected dying. Two out of five males and females in the third generation were obese.

Skinner and his colleagues call this phenomenon “generational toxicology” and they’ve seen it over the years in fungicides, pesticides, jet fuel, the plastics compound bisphenol A, the insect repellent DEET and the herbicide atrazine. At work are epigenetic changes that turn genes on and off, often because of environmental influences.

### **Documents reveal European Commission bowed to demands of pesticide lobbies**

#### **They allowed the European Glyphosate Task Force to reassess their own products**

An environmental non-profit has obtained documents showing the extent to which the European Commission has been lobbied by pesticide producers seeking to protect their interests, leading to a more lenient regulation of these controversial substances<sup>44</sup>

The environmental group, Pesticide Action Network Europe (PAN), has obtained over 600 documents from the Commission showing top EU officials fighting to “cripple” the bloc’s pesticide protection legislation. “*The Commission has chosen the side of the industry,*” PAN’s Chemicals Coordinator Hans Muilerman told *De Morgen*.<sup>45</sup>

The haul of over 600 documents was obtained after a two-year legal battle won by the Pesticide Action Network Europe (PAN). They show top officials trying to protect chemical and farming interests from incoming European [rules](#) that were expected to directly ban up to 32 ([page 115](#)) endocrine disrupting (EDC) pesticides. The law set out specifically to protect human, animal health and the environment and followed 25 years of mounting scientific evidence linking EDC pesticides to severe human health impacts and gender-bending effects on animals. They may be the cause of [birth defects](#) that shocked France last year and made international news headlines.

The secret papers, released by [order](#) of European Court of Justice, show an internal struggle to define scientific criteria for identifying and banning EDC pesticides. Outnumbered environment and research department officials are seen resisting attempts by agriculture, enterprise, industry and

<sup>43</sup> <https://www.nature.com/articles/s41598-019-42860-0>

<sup>44</sup> <http://www.brusselstimes.com/eu-affairs/15496/documents-lobbies-attempts-cripple-undermine-pesticide-regulation-eu>

<sup>45</sup> <https://www.pan-europe.info/press-releases/2019/05/top-eu-officials-fought-higher-pesticide-exposure-secret-documents-show>

even health department officials to water down the criteria by introducing non-scientific factors, such as farming profitability. They were joined by the Commission Secretary General who orchestrated [documents 42, 559] a flawed impact assessment process. Its bizarre early results downplayed health impacts [document 258]; found that the more pesticides that remained in use, the less the impact on health and the environment [document 560]; and that the fewer EDC pesticides identified, the better [document 273].

A new [report](#) for the Commission, written together with industry-linked experts and supporters of anti-regulation pressure groups, recommends [scrapping](#) the hazards approach. [This is the Report.](#)

### **Scientific advice in the area of authorisation processes of plant protection products<sup>46</sup>**

Following a request from the College of Commissioners, led by Commissioner Andriukaitis, the European Commission's Group of Chief Scientific Advisors (former High-Level Group of Scientific Advisors) adopted at their 7th meeting (23-24 March 2017) a scoping paper (see below) confirming their intention to produce a Scientific Opinion on "Authorisation processes of Plant Protection Products in Europe from a scientific point of view".

Experts from across Europe nominated by [SAPEA \(Science Advice for Policy by European Academies\)](#) contributed with their knowledge and expertise to this topic. A co-ordination group was established by the Group of Chief Scientific Advisors to which SAPEA experts Professors David N. Coggon, Jean Golding, Paul Miller, Evangelia Ntzani, Dominique Parent-Massin, Colin Ockleford, Susanne Hougaard Bennekou and Alan Boobis were invited. The Group of Chief Scientific Advisors also established a sounding board to which experts Thomas Backhaus, Hubert Deluyker, Daniel Dietrich and Jørgen Schlundt, were invited and were involved in fact checking the draft final scientific opinion. Their aim was to **increase** the use of pesticides.

Experts' declarations of interest were examined by the Commission and no declared interests were found to constitute a conflict of interest. These declarations of interest were published at the same time as the Group of Chief Scientific Advisors' scientific advice and remained available for consultation for six months.

The EU Commission only assesses the active ingredient glyphosate. "While active substances are approved at EU level, plant protection products are authorised by national authorities in each EU Member State taking into account their agricultural and environmental conditions."<sup>47</sup>

EFSA said that glyphosate was not ecotoxic even though ECHA classified it as a substance that is toxic to aquatic invertebrates with long lasting effects (and causes serious eye damage).<sup>48</sup>

The European regulators had simply cut and pasted what Monsanto had chosen for them.<sup>49</sup> No scientific papers from Latin America, where Roundup Ready Crops had been forced on them in 1996, were selected.

### **The European Chemicals Agency classified glyphosate as a substance causing serious eye damage and toxic to aquatic life with long-lasting effects**

This shows why there are long waiting lists for cataracts in England are leaving the elderly at risk.<sup>50</sup> In Wales, 35,000 patients are at risk of going blind from macular degeneration and glaucoma while on the waiting list.<sup>51</sup>

<sup>46</sup> <https://ec.europa.eu/research/sam/index.cfm?pg=pesticides>

<sup>47</sup> [https://ec.europa.eu/food/sites/food/files/plant/docs/pesticides\\_glyphosate\\_eci\\_final.pdf](https://ec.europa.eu/food/sites/food/files/plant/docs/pesticides_glyphosate_eci_final.pdf)

<sup>48</sup> <https://echa.europa.eu/-/glyphosate-not-classified-as-a-carcinogen-by-echa>

<sup>49</sup> <https://www.theguardian.com/environment/2017/sep/15/eu-report-on-weedkiller-safety-copied-text-from-monsanto-study>

<sup>50</sup> <https://www.theguardian.com/society/2019/jul/20/massive-delays-in-cataract-operations-elderly-vulnerable-private-sector>

<sup>51</sup> <https://www.bbc.co.uk/news/uk-wales-48585767>

Aquatic invertebrates have been wiped out by GBH used for spraying on riverside vegetation and salmon and trout are disappearing from rivers in Wales, England and Scotland. The riverfly census Report by the Salmon and Trout Conservation 15/05/2019 is showing worrying trends.<sup>52</sup>

*"The Riverfly Census highlights worrying declines of aquatic insects in English rivers as a direct consequence of industrial, agricultural and domestic pollution. Aquatic insects are the equivalent of "the canary in the coal mine" when ascertaining the health of individual rivers. Declines of up to 58% in some species have been observed in the last thirty years, with no sign of the trend reversing. Exacerbating the crisis facing the health of our rivers is a framework of weak environmental regulations, which too often fail to address real world issues such as the concurrent release of chemicals and their cumulative effects. When combined with a long-standing culture of apparent light touch enforcement, the existing regulatory framework is wholly failing to offer adequate protection." Somewhat worryingly however, until the Welsh Minister for the Environment, Energy and Rural Affairs decides to approve similar bylaws for Wales, proposed eighteen months ago by Natural Resources Wales (NRW), this EA bylaw cannot be enforced on the Welsh reaches of the Severn, nor its tributaries. Further, despite the stock assessment for 2018 showing every salmon river in Wales to be "at risk, or probably at risk, of failing to meet its conservation limits," NRW remain unable to extend the enforcement of compulsory catch and release of salmon to all Welsh rivers.[1] Solely the result of political feet dragging.<sup>53</sup>*

### **The Glyphosate Task Force omitted studies from South America where GM crops are grown: cancer, birth defects, infertility, DNA damage and neurotoxicity were reported**

#### **The Glyphosate Task Force omitted studies from South America**

The 3<sup>rd</sup> National Conference of Physicians of Crop-sprayed Towns of Argentina<sup>54</sup>

The paper by Dr Ávila-Vázquez is titled: Cancer and detrimental reproductive effects in an Argentine agricultural community environmentally exposed to glyphosate.<sup>55</sup>

#### **Extracts: Birth defects and increasing cancer**

After 18 years of systematic sprayings, health teams in fumigated towns detect a change in the pattern of diseases in their populations: respiratory problems are much more common and are linked to the application of agricultural poisons, as is chronic dermatitis. Similarly, during fumigation, epileptic patients convulse much more frequently, and depression, immune and endocrine disorders are more frequent. High rates of miscarriages are recorded (up to 23 % of women of reproductive age had at least one abortion in the past 5 years) and consultations for infertility in men and women have significantly increased. Herds of goats belonging to farmers and indigenous people in some areas record up to 100 % of abortions or premature deaths due to malformations linked to pesticide exposure. Increased thyroid disorders and diabetes are also detected in local people.

More and more children are born with defects in these areas, especially if the first months of pregnancy coincide with the time of spraying. Down's syndrome, spina bifida, myelomeningocele (neural tube defect), congenital heart disease, etc. are diagnosed more frequently in those areas; in some towns and during some years, at triple the normal rates, and directly linked to increased pesticide applications around the towns [3, 4] (see Figure 1). Neural tube defects are among the most common developmental birth defects observed, which is consistent with lab studies and farm observations. ...Increasing pesticide residues in foods made with grains are a growing concern in Europe, and its danger has become evident especially after investigations by the French researcher Gilles-Eric Séralini [27]. Recently, glyphosate was detected in urine of students from the University of Berlin and other Europeans from 18 different countries, and was less high in those on organic diets; in cattle and rabbits similar results were obtained: higher levels of glyphosate in urine and tissues

<sup>52</sup> <https://www.salmon-trout.org/2019/05/15/the-riverfly-census-full-report/>

<sup>53</sup> <https://www.salmon-trout.org/2019/07/01/salmon-stock-exploitation-wales-delays-while-england-acts/>

<sup>54</sup> <http://reduas.com.ar/3rd-national-conference-of-physicians-of-crop-sprayed-towns/>

<sup>55</sup> [http://www.i-sis.org.uk/Devastating\\_Impacts\\_of\\_Glyphosate\\_Argentina.php](http://www.i-sis.org.uk/Devastating_Impacts_of_Glyphosate_Argentina.php)

from those fed GM fodder [28]. The export market to Europe is poised to shrink as consumers reject GMOs and glyphosate tainted food. To overcome the problems caused by the resistance of weeds and insects, the biotech industry (Monsanto, Bayer, Dow, Dupont, etc.) is providing more of the same. New transgenic seeds are promoted, which are tolerant to glyphosate, glufosinate and 2,4-D [29]. Do we want yet higher levels of more and more dangerous herbicides in our food, when the existing burden on health is already intolerable?"

### **Neurotransmitter changes in the brain from exposure to Glyphosate-based herbicides**

Many papers come from Latin American countries where they grow almost exclusively GM Roundup Ready Crops that Monsanto forced on them in 1996. Here are three papers.

Behavioral impairments following repeated intranasal glyphosate-based herbicide administration in mice.<sup>56</sup>

*Taken together, our findings demonstrate that intranasal (IN) exposure to commercial Gly-BH produces alterations in locomotor activity, anxiety and memory in adult mice. These observations could be a consequence of alterations in neurotransmission systems comprising the GABAergic, dopaminergic, serotonergic and/or cholinergic systems.*" In this research paper there are references to many papers from around the world that confirm the glyphosate-based herbicides are damaging to the development of the foetal brain and that repeated exposure is toxic to the adult human brain and may result in alterations in locomotor activity, feelings of anxiety and memory impairment.

Martínez, M. A., Ares, I., Rodríguez, J. L., Martínez, M., Martínez-Larrañaga, M. R., & Anadón, A. (2018). Neurotransmitter changes in rat brain regions following glyphosate exposure. *Environmental Research*, 161, 212-219.<sup>57</sup>

Highlights:

- Glyphosate oral exposure caused neurotoxicity in rats.
- Brain regions were susceptible to changes in CNS monoamine levels.
- Glyphosate reduced 5-HT, DA, NE levels in a brain regional- and dose-related manner.
- Glyphosate altered the serotonergic, dopaminergic and noradrenergic systems.

Mechanisms underlying the neurotoxicity induced by glyphosate-based herbicide in immature rat hippocampus: Involvement of glutamate excitotoxicity.<sup>58</sup>

**This is why there are so many mental health and psychiatric disorders, depression, suicides, anxiety and violence among children and adults (politicians included).**

**David Cameron, Defra, EFSA, the European Commission and ECHA ignored the warnings from more than 60 million US citizens that GM crops and Roundup were hazardous to human health and the environment**

**The Open Letter from America was from more than 60 million American citizens<sup>59</sup>**

to David Cameron on 12/11/2014 (and the rest of the EU) warning them not to authorize GM crops and/or glyphosate because of the devastating effects on human health and the environment.

Extracts: "In our country, GM crops account for about half of harvested cropland. Around 94% of the soy, 93% of corn (maize) and 96% of cotton grown is GM. The UK and the rest of the EU have yet to adopt GM crops in the way that we have, but you are currently under tremendous pressure from governments, biotech lobbyists, and large corporations to adopt what we now regard as a failing agricultural technology...Studies of animals fed GM foods and/or glyphosate, however, show worrying trends including damage to vital organs like the liver and kidneys, damage to gut tissues and gut flora, immune system disruption, reproductive abnormalities, and even tumors.35...These

<sup>56</sup> <https://www.sciencedirect.com/science/article/pii/S0892036217301526>

<sup>57</sup> <https://www.sciencedirect.com/science/article/pii/S0013935117316730>

<sup>58</sup> <https://www.sciencedirect.com/science/article/pii/S0300483X14000493>

<sup>59</sup> [www.theletterfromamerica.org](http://www.theletterfromamerica.org)

*scientific studies point to potentially serious human health problems that could not have been anticipated when our country first embraced GMOs, and yet they continue to be ignored by those who should be protecting us. Instead our regulators rely on outdated studies and other information funded and supplied by biotech companies that, not surprisingly, dismiss all health concerns.*

*Through our experience we have come to understand that the genetic engineering of food has never really been about public good, or feeding the hungry, or supporting our farmers. Nor is it about consumer choice. Instead it is about private, corporate control of the food system.*

*Americans are reaping the detrimental impacts of this risky and unproven agricultural technology. EU countries should take note: there are no benefits from GM crops great enough to offset these impacts. Officials who continue to ignore this fact are guilty of a gross dereliction of duty.*

*If the UK and the rest of Europe becomes the new market for genetically modified crops and food our own efforts to label and regulate GMOs will be all the more difficult, if not impossible. If our efforts fail, your attempts to keep GMOs out of Europe will also fail.*

*If we work together, however, we can revitalize our global food system, ensuring healthy soil, healthy fields, healthy food and healthy people.”*

Most countries in the EU took that advice and opted out of GM (including Scotland, Wales and Ireland).

**David Cameron ignored that advice on behalf of England. He and Defra concealed the letter from the British public.**

The European Commission and the European Food Safety Authority also ignored it and continued to approve GM Crops for growing and for food and feed in the EU. This was despite these grave warnings from American citizens of their experiences (Living with GMOs) and from independent organisations in Europe, such as Testbiotech (Germany), CRIIGEN (France), Corporate Europe Observatory, Earth Open Source, Greenpeace and Pesticides Action Network.

### **NFU and Defra plan for GM Roundup Ready Crops after Brexit, despite ADAS reporting weed resistance to Roundup**

**Georgina Downs (UK Pesticides Campaign) writes on the Government’s Agriculture Bill after Brexit<sup>60</sup>**

*Extracts: “The long-awaited Agriculture Bill finally made its first appearance this week when it was introduced before Parliament. This is the UK Government’s plan on what UK farming will look like post Brexit. There is no reference to the protection of human health or public health in the Agriculture Bill as regards to farmers, the main users of pesticides - despite the DEFRA Consultation that preceded the publication of the Agriculture Bill being called Health and Harmony.*

*The widespread use of pesticides and other toxic chemicals in our existing farming system appears to be the Government’s ‘elephant in the room’ because of DEFRA’s reluctance to mention it - let alone focus on it. Therefore, there is no recognition or even any specific reference in the Agriculture Bill - or Mr Gove’s statements - to the continued risks associated with the continued use of pesticides and other agrochemicals on crop fields across the UK. Latest Government statistics show that regarding just pesticides alone (i.e. not including chemical fertilisers and all the other agrochemicals used in conventional farming), in 2014 the total area treated with pesticides on agricultural and horticultural crops was 80,107,993 hectares, with the total weight applied 17,757,242 kg.”*

*Ms Downs appealed to Theresa May to stop multiple pesticides from being sprayed on rural residents, but she has been silent on the matter.*

<sup>60</sup> <https://theecologist.org/2018/sep/14/new-uk-agriculture-bill-triumph-or-travesty>

### **The UK Farming Minister was interviewed by Arthur Neslen on 30/05/2016 about Brexit**

He said: “*The [birds and habitats directives](#) would go. But the directives’ framework is so rigid that it is spirit-crushing.*” On **pesticides**, he said “*the EU’s [precautionary principle](#) needed to be reformed in favour of a US-style risk-based approach, allowing faster authorisation.*”

Defra is quoted as saying that after Brexit: “*The most promising crops suitable for introducing to England would be Roundup Ready GA21 glyphosate tolerant crops, which synergises well with herbicides already widely used in the UK. Empowering farmers to use the cutting-edge crop science innovations that are available is certainly one opportunity presented by shifting the responsibility for licencing domestically post-Brexit. Although the blanket spraying of herbicides like Roundup present challenges regarding their impact on the environment and animals, the more obvious solution would be to regulate the technique, not the actual product because it would make that possible.*”<sup>61</sup>

**The alleged ‘first’ glyphosate-resistant weed in Britain has just been reported by scientists from ADAS, the body that endorsed Monsanto’s suggestion of spraying pre-harvest glyphosate in 1980** *Poverty brome (*Bromus sterilis* L.) [sterile or barren brome, syn. *Anisantha sterilis* (L.) Nevski] is a problematic UK arable weed. There are currently no confirmed cases of glyphosate resistance in any weed species in the United Kingdom or in *B. sterilis* worldwide... This, coupled with increasing glyphosate use, highlights the need for increased vigilance and monitoring for glyphosate resistance in the United Kingdom.*<sup>62</sup>

Has anyone looked at Black Grass, (*Alopecurus agrestis* L.)? Herbicide-resistant black grass, first seen in 1982 (only two years after farmers started spraying glyphosate pre-harvest) and is now found on 16,000 farms in 34 counties. This was the reason Guy Gagen gave for an increase in Roundup sprayed between 2012 and 2014. Ben Webster of the Times reported: “*Farmers have sharply increased their use of a weedkiller that has been classified as “probably carcinogenic to humans”.*<sup>63</sup> *More than 1,700 tonnes of glyphosate were sprayed on crops last year, up a third on 2012, according to the Department for Environment, Food and Rural Affairs (Defra). The total area sprayed with the weedkiller grew by almost 500,000 hectares to 2.1 million hectares, an area the size of Wales.”* Guy Gagen said: “*No farmer would be wanting to put a chemical on a crop when he doesn’t need to.*” He added that spraying wheat could result in traces of glyphosate ending up in bread sold in supermarkets but the amount was well below the maximum residue level set by the EU. A Defra spokesman said: “*There are extensive regulations in place so that people and the environment are protected from pesticides. The approval of glyphosate for use across Europe is being reviewed by the EU Commission.*”

### **Herbicide-Resistant weeds in the US**

International Survey of Herbicide-Resistant Weeds<sup>64</sup> Updated to July 2018. Run the cursor over the map and it will tell you how many herbicide-resistant weeds each US State has. The number of herbicide-resistant weeds in the US vary from one (Massachusetts) to 30 (California). California is the fruit-growing capital of the US.

### **Massive amounts of glyphosate used globally**

‘In 2016, Charles Benbrook reported Trends in glyphosate use in the US and globally: 1974-2014. Between 1994 and 2014 the estimated global use of glyphosate was 8.6 billion kilograms and nearly 0.53 kg/ha (0.47 pounds/acre) on all cropland worldwide.’<sup>65</sup> That doesn’t include amenity use.

<sup>61</sup> <https://www.politicshome.com/news/uk/foreign-affairs/brexit/opinion/dods-monitoring/95900/future-food-will-defra-embrace-gmos>

<sup>62</sup> <https://www.cambridge.org/core/journals/weed-science/article/first-cases-of-evolving-glyphosate-resistance-in-uk-poverty-brome-bromus-sterilis-populations/2EC536244FC205586290731EF1BE4593>

<sup>63</sup> <https://www.thetimes.co.uk/article/farmers-using-more-carcinogenic-weed-killer-76bl8lw95t5>

<sup>64</sup> <http://weedsience.org/vmap/statemap.aspx>

<sup>65</sup> <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5044953/>

## US Farms growing GM Roundup Ready crops are biological deserts

### A first-hand description of the effects of GM Roundup Ready corn on biodiversity

EFSA said that glyphosate was not ecotoxic even though ECHA classified it as such.

Childs, C. *Apocalyptic Planet. Field Guide to the Future of the Earth.* <sup>66</sup>

Chapter 6 Species Vanish: Page 185. Grundy County, Iowa was where Craig Childs spent a long weekend in a monoculture of GM-Roundup® Ready Corn looking for wildlife.

Page 187: "In this cornfield, I had come to a different kind of planetary evolution. I listened and heard nothing, no bird, no click of an insect ... Page 188: Mr Owen was the farmer who had given us permission to backpack across his cornfields. He grew a combination of DuPont and Monsanto stock. We were in DuPont now. It didn't look any different to me."

Robert Krulwich's blog commented on Craig Child's description: <sup>67</sup> "Corn farmers champion corn. Anything that might eat corn, hurt corn, bother corn, is killed. Their corn is bred to fight pests. The ground is sprayed. The stalks are sprayed again. So, Craig wondered, "What will I find?" The answer amazed me. He found almost nothing. There were no bees. The air, the ground, seemed vacant. He found one ant "so small you couldn't pin it to a specimen board." A little later, crawling to a different row, he found one mushroom, "the size of an apple seed." Then, later, a cobweb spider eating a crane fly (only one). A single red mite "the size of a dust mote hurrying across the barren earth," some grasshoppers, and that's it." Though he crawled and crawled, he found nothing else. "It felt like another planet entirely," he said, a world denuded.

Yet, 100 years ago, these same fields, these prairies, were home to 300 species of plants, 60 mammals, 300 birds, hundreds and hundreds of insects. This soil was the richest, the loamiest in the state. And now, in these patches, there is almost literally nothing but one kind of living thing. We've erased everything else. There's something strange about a farm that intentionally creates a biological desert to produce food for one species: us. It's efficient, yes. But it's so efficient that the ants are missing, the bees are missing, and even the birds stay away. Something's not right here. Our cornfields are too quiet."

Page 192: Childs said: "I chose Iowa for a mass-extinction analogue because it is the most thorough picture of genetic exhaustion, the many organs of what was once tallgrass prairie removed and replaced with this."

Iowa was just one state in which the US Geological Survey said: "Glyphosate and AMPA were detected frequently in soils and sediment, ditches and drains, precipitation, rivers, and streams; and less frequently in lakes, ponds, and wetlands; soil water; and groundwater."<sup>68</sup>

### The use of clothianidin (Bayer CropScience) is widespread across Iowa

"Seventy-nine water samples from a network of nine sites across Iowa (U.S.) were collected during the 2013 growing season. Clothianidin was detected most frequently (75%), it is the most heavily used neonicotinoid in Iowa, it has a long soil degradation half-life (545 days) aerobic soil metabolism half-life under a variety of soil conditions was 148-1,155 days."<sup>69</sup>

### The former 'top' scientist of the European Commission defended the registration of clothianidin, a chemical with a long half-life in soil

According to (EC) 1107/2009 clothianidin should never have been registered in the first place because it failed to the EU criteria for half-life in soil; this should be no greater than 120 days.

<sup>66</sup> Childs, C. *Apocalyptic Planet. Field Guide to the Future of the Earth*, New York: Vintage Books (2013).

<sup>67</sup> <https://www.npr.org/sections/krulwich/2012/11/29/166156242/cornstalks-everywhere-but-nothing-else-not-even-a-bee>

<sup>68</sup> <http://onlinelibrary.wiley.com/doi/10.1111/jawr.12159/abstract>

<sup>69</sup> <http://ca.water.usgs.gov/pubs/2014/HladikKolpinKuivila2014.pdf>

However, when challenged, Michael Flüh former Head of Unit Pesticides and Biocides for the European Commission defended this. *“The allegation as regards the illegality of the registration of clothianidin is strongly rejected. The assessment of clothianidin, carried out by a Rapporteur Member State (RMS), and peer reviewed by experts from all Member States, concluded that safe uses for this substance exist. The assessment covered the persistence of the substance in soil as well as its toxicity and leaching potential.”* Michael Flüh was a non-scientist.

### **Government and UK media ignored UN Reports from experts on toxics and food**

**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** <sup>70</sup>

*“A pending decision on Monsanto’s ubiquitous weedkiller is a crucial opportunity to protect our children from the toxic cocktail of pesticides polluting their food, water and play areas.”*

*“Our children are growing up exposed to a toxic cocktail of weedkillers, insecticides, and fungicides. It’s on their food and in their water, **and it’s even doused over their parks and playgrounds**. Many governments insist that our standards of protection from these pesticides are strong enough. But as a scientist and a lawyer who specialises in chemicals and their potential impact on people’s fundamental rights, I beg to differ. Last month it was revealed that in recommending that glyphosate – the world’s most widely-used pesticide – was safe, the EU’s food safety watchdog copied and pasted pages of a report directly from Monsanto, the pesticide’s manufacturer. Revelations like these are simply shocking.*

*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. These chemicals are everywhere and they are invisible. 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.*

*Paediatricians have referred to childhood exposure to pesticides as creating a “silent pandemic” of disease and disability. Exposure in pregnancy and childhood is linked to birth defects, diabetes, and cancer. Because a child’s developing body is more sensitive to exposure than adults and takes in more of everything – relative to their size, children eat, breathe, and drink much more than adults – they are particularly vulnerable to these toxic chemicals. Increasing evidence shows that even at “low” doses of childhood exposure, irreversible health impacts can result. But, most victims cannot prove the cause of their disability or disease, limiting our ability to hold those responsible to account. In light of revelations such as the copy-and-paste scandal, a careful re-examination of the performance of states is required. The overwhelming reliance of regulators on industry-funded studies, the exclusion of independent science from assessments, and the confidentiality of studies relied upon by authorities must change.”*

### **The British Government colluded with Monsanto and Bayer in 1949 and continues to work with them against the people**

After WW2, in 1949, following the Nuremberg trials, the Westminster Government invited Monsanto to set up a chemical factory in Newport, Wales, as far away from London as possible. They also worked with Bayer, the former IG Farben, the private chemical company that collaborated with

<sup>70</sup> <https://www.theguardian.com/environment/2017/nov/06/the-eu-and-glyphosate-its-time-to-put-childrens-health-before-pesticides>

the Nazis.<sup>71</sup> *"It built a factory next to Auschwitz, Poland, so it could exploit Jewish slave labour in its oil and rubber production plant. In total, some 300,000 detainees from Auschwitz were employed in IG Farben's workforce, supplying the company with free labour. The company housed the workers in its own concentration camp, with the horrendous conditions there and in the factory leading to an estimated 30,000 deaths. On top of this, an unknown number of workers deemed unfit to continue working at the factory were sent to the death camp at Auschwitz. Alongside the brutal conditions of the labour camp, IG Farben also sanctioned drug experiments on live, healthy inmates. IG Farben was probably the most well-known corporate participant in the Holocaust, and the company's history sheds a chilling light on how genocide became tied in with economics and business."*

Both companies used factories that had made chemical weapons in the war to make chemicals for agriculture from the same ingredients. From then on, Monsanto's factory in Wales manufactured PCBs until 1977 and a number of other dangerous chemicals. Monsanto was found to be dumping toxic waste in the River Severn, public waterways and sewerage. After that they paid a contractor to illegally dump *"thousands of tons of cancer-causing chemicals - among them PCBs, dioxins and Agent Orange derivatives"* at two quarries in Wales: Brofiscin (80,000 tonnes) and Maendy (42,000 tonnes) between 1965 and 1972. In 1968 US documents showed that Monsanto tried to decide whether or not to come clean about the dangers of the chemicals. They stopped making PCBs in Anniston US in 1971 because of scandals about PCBs on the health of the population and wildlife. However, the British government led by Ted Heath agreed to ramp up production at the Monsanto plant in Newport. Alabama is more than 50 million square miles: Wales is 8,000 square miles.

In 2003 when toxic effluent from the quarry starting leaking into people's streams in Grosfaen just outside Cardiff, the Environment Agency - a government agency concerned with flooding and pollution – was hired to clean up the site in 2005.<sup>72</sup>

*"Firstly, the Agency repeatedly failed to hold Monsanto accountable for its role in the pollution (a role that Monsanto denied from the outset). Secondly, the Agency consistently downplayed the dangers of the chemicals themselves, even claiming that they offered no "identifiable harm or immediate danger to human health" in their official report."*

According to engineering company WS Atkins, in a report prepared for the agency and the local authority in 2005 **but never made public**, the site contains at least 67 toxic chemicals. Seven PCBs have been identified, along with vinyl chlorides and naphthalene. The unlined quarry is still leaking, the report says. *"Pollution of water has been occurring since the 1970s, the waste and groundwater has been shown to contain significant quantities of poisonous, noxious and polluting material, pollution of ... waters will continue to occur."*

Rosemary Mason 26<sup>th</sup> July 2019

<sup>71</sup> <https://www.newhistorian.com/ig-farben-opens-factory-at-auschwitz/3822/>

<sup>72</sup> <https://theecologist.org/2007/oct/11/burying-truth-orginal-ecologist-investigation-monsanto-and-brofiscin-quarry>