

Gone Fishing? No Fish but Plenty of Pesticides and a Public Health Crisis

By [Colin Todhunter](#) and [Rosemary Mason](#)

Global Research, January 15, 2020

Region: [Europe](#)

Theme: [Biotechnology and GMO](#)

There is [mounting evidence](#) that a healthy soil microbiome protects plants from pests and diseases. One of the greatest natural assets that humankind has is soil. But when you drench it with proprietary synthetic chemicals or continuously monocrop as part of a corporate-controlled industrial farming system, you can kill essential microbes, upset soil balance and end up feeding soil a limited [doughnut diet](#) of unhealthy inputs.

Armed with their synthetic biocides, this is what the transnational agritech conglomerates do. These companies attempt to get various regulatory and policy-making bodies to bow before the altar of corporate 'science'. But, in reality, they have limited insight into the long-term impacts their actions have on soil and its [complex networks](#) of microbes and microbiological processes. Soil microbiologists are themselves still trying to comprehend it all.

That much is clear [when Linda Kinkel](#) of the University of Minnesota's Department of Plant Pathology said back in 2014: "We understand only a fraction of what microbes do to aid in plant growth."

And it's the same where 'human soil' is concerned.

People have a deep microbiological connection to soils and traditional processing and fermentation processes, which all affect the gut microbiome – the up to six pounds of bacteria, viruses and microbes akin to human soil. And as with actual soil, the microbiome can become degraded according to what we ingest (or fail to ingest). Many nerve endings from major organs are located in the gut and the microbiome effectively nourishes them. There is ongoing research taking place into how the microbiome is disrupted by the modern globalised food production/processing system and the chemical bombardment it is subjected to.

The human microbiome is of vital importance to human health yet it is under chemical attack from agri-food giants and their agrochemicals and food additives. As soon as we stopped eating locally-grown, traditionally-processed food, cultivated in healthy soils and began eating food subjected to chemical-laden cultivation and processing activities, we began to change ourselves. Along with cultural traditions surrounding food production and the seasons, we also lost our deep-rooted microbiological connection with our localities. It was traded in for corporate chemicals and seeds and global food chains dominated by the likes of Monsanto (now Bayer), Nestle and Cargill.

Environmentalist Dr Rosemary Mason says that glyphosate disrupts the shikimate pathway within these gut bacteria and is a strong chelator of essential minerals, such as cobalt, zinc,

manganese, calcium, molybdenum and sulphate. In addition, it kills off beneficial gut bacteria and allows toxic bacteria to flourish. She adds that we are therefore facing a global metabolic health crisis linked to glyphosate.

Many key neurotransmitters are located in the gut. Aside from affecting the functioning of major organs, these transmitters affect our moods and thinking. There is strong evidence that gut bacteria can have a direct physical impact on the brain. Alterations in the composition of the gut microbiome have been implicated in a wide range of neurological and psychiatric conditions, including autism, chronic pain, depression and Parkinson's Disease.

Recently published research indicates that glyphosate and Roundup are proven to disrupt gut microbiome by inhibiting the shikimate pathway. Dr Michael Antoniou of King's College London [has found that](#) Roundup herbicide and its active ingredient glyphosate cause a dramatic increase in the levels of two substances, shikimic acid and 3-dehydroshikimic acid, in the gut, which are a direct indication that the EPSPS enzyme of the shikimic acid pathway has been severely inhibited. The researchers found that Roundup and glyphosate affected the microbiome at all dose levels tested, causing shifts in bacterial populations.

This confirms what Mason has been highlighting for some time. However, she has also been pointing out the environmental degradation resulting from the spiralling use of glyphosate-based herbicides and has just written an open letter to the Principal Fisheries Officer of Natural Resources Wales (NRW), Peter Gough (NRW is the environment agency for Wales).

The letter runs to 20 pages and focuses on glyphosate and neonicotinoid insecticides. She asks who would re-authorise a pesticide that is toxic to aquatic life with long lasting effects and is causing serious eye damage along with various forms of cancers and a wide range of other health conditions?

She answers her question by saying the European Glyphosate Task Force and Jean-Claude Juncker President of the EC along with various regulators in Europe who have basically capitulated to an industry agenda. Mason argues that the European Glyphosate Task Force (who actually did the re-assessment of glyphosate) omitted all the studies from South America where they had been growing GM Roundup Ready crops since 1996. She discusses the suppression of key research which indicated the harmful effects of glyphosate.

The Principal Fisheries Scientist Wales sent Mason two NRW Reports two years ago. In it, Mason discovered that giant hogweed on the River Usk bank had been treated with a glyphosate-based herbicide. NRW had also admitted to not studying the effects of neonicotinoids, which had been introduced in 1994. Mason pointed out to NRW that run-off from farms of clothianidin in seeds would be enough to kill off aquatic invertebrates.

In early January, NRW attempted to explain the absence of salmon and trout in the River Usk on climate change (warming of the river), rather than poisoning of the river, which is what Mason had warned the agency about two years ago.

In Britain, information on emerging water contaminants has been suppressed, according to Mason, and there is no monitoring of either neonics or glyphosate in surface or ground water. In the US, though, measurements of these chemicals have been carried out on farmland and their correlation with massive declines in invertebrates by separate agencies and universities in the US and Canada.

Mason notes there has been 70 years of poisoning the land with pesticides. Although the National Farmers Union and the Department for Environment and Rural Affairs in the UK say fewer pesticides are now being applied, the Soil Association indicates massive increases of increasing numbers of pesticides at decreasing intervals (official statistics obtained via a Freedom of Information request).

Readers should consult the full text of Mason's open letter on the acamedia.edu site to gain wider insight into the issues outlined above and many more, such as government collusion with major agrochemical corporations, the shaping of official narratives on illness and disease to obscure the role of pesticides and Monsanto's poisoning of Wales.

What Mason outlines is not specific to Wales or the UK; the increasing use of damaging agrochemicals and government collusion with the industry transcends national borders. Nation states are becoming increasingly obsolete and powerless in the face of globalised capitalist interests that seek to capture and exploit markets, especially in the Global South.

What follows is the e-mail that Mason sent to Peter Gough by way of introducing her letter to him.

Dear Peter,

The European Chemicals Agency (ECHA) classified glyphosate as a substance that is toxic to aquatic life with long lasting effects

Your colleague Dave Charlesworth declared on BBC 1 Breakfast last week that the declines in salmon and trout were due to climate change and warming of the rivers. I told you just over 2 years ago that it was due to pesticides and showed you the proof from assorted NRW documents you sent me.

Why are NRW, the government, 'top' UK doctors, farmers, the corporations, the media and global pesticides regulators protecting the agrochemical industry? All of you could suffer from the effects of pesticides in food, in water, in the air and in rain. Why don't you inform the people?

Monsanto claims that Roundup doesn't affect humans, but their sealed secret studies that scientist Anthony Samsel obtained from the US EPA, shows evidence of cancers and that bioaccumulation of ¹⁴C labelled glyphosate occurred in every organ of the body (page 9).

The NFU and Defra deny they are responsible for 70 years of poisoning the land and the subsequent insect apocalypse; they should read their own document "Healthy Harvest." The National Farmers' Union (NFU), the Crop Protection Association (CPA) and the Agricultural Industries Confederation (AIC) combined to lobby the EU not to restrict the 320+ pesticides available to them.

The publication is called: HEALTHY HARVEST.^[1] (Pages 6-9)

The Department of Health and the Chief Medical Officer for England claim that parents are responsible for obesity in primary school children. However, Pesticides Action Network (PAN) analysed the Department of Health's Schools Fruit and Vegetable Scheme and found that there were residues of 123 pesticides in it, some of which are linked to serious health problems such as cancer and disruption of the hormone system.

When PAN informed them, they said that pesticides were not the concern of the DOH. (Page 14, 13-16).

Dr Don Huber, Emeritus Professor of Plant Pathology, Purdue University, US, speaking about GMO crops and glyphosate, said: "Future historians may well look back upon our time and write, not about how many pounds of pesticide we did or didn't apply, but by how willing we are to sacrifice our children and future generations for this massive genetic engineering experiment that is based on flawed science and failed promises just to benefit the bottom line of a commercial enterprise." (Page 18)

Kind regards,

Rosemary

*

Note to readers: please click the share buttons above or below. Forward this article to your email lists. Crosspost on your blog site, internet forums. etc.

Colin Todhunter is a frequent contributor to Global Research and Asia-Pacific Research.

Featured image is from Flickr

The original source of this article is Global Research

Copyright © [Colin Todhunter](#) and [Rosemary Mason](#), Global Research, 2020

[Comment on Global Research Articles on our Facebook page](#)

[Become a Member of Global Research](#)

Articles by: [Colin Todhunter](#)
and [Rosemary Mason](#)

About the author:

Colin Todhunter is an extensively published independent writer and former social policy researcher. Originally from the UK, he has spent many years in India. His website is www.colintodhunter.com
https://twitter.com/colin_todhunter

Disclaimer: The contents of this article are of sole responsibility of the author(s). The Centre for Research on Globalization will not be responsible for any inaccurate or incorrect statement in this article. The Centre of Research on Globalization grants permission to cross-post Global Research articles on community internet sites as long the source and copyright are acknowledged together with a hyperlink to the original Global Research article. For publication of Global Research articles in print or other forms including commercial internet sites, contact: publications@globalresearch.ca

www.globalresearch.ca contains copyrighted material the use of which has not always been specifically authorized by the copyright owner. We are making such material available to our readers under the provisions of "fair use" in an effort to advance a better understanding of political, economic and social issues. The material on this site is distributed without profit to those who have expressed a prior interest in receiving it for research and educational purposes. If you wish to use copyrighted material for purposes other than "fair use" you must request permission from the copyright owner.

For media inquiries: publications@globalresearch.ca