

Viewpoint: Concerned whether pesticides in the environment are safe? Listen to hands-on experts, not ideologues

Few environmental issues are more controversial than the potential danger of pesticides used to tame weeds and disease in crops. Supporters of the discriminating use of pesticides, including many farmers, scientists, and regulators defend their use.

But there are also detractors, including scientists, some independent but many aligned with environmental advocacy groups, particularly the organic farming movement.

Both sides cite the science and allege that the other side is ideologically biased or in the pay of big agribusiness. How can the average person determine what to believe?

One of the more pernicious aspects of our media ecosystem is that, often, the people with the most relevant experience relating to a high-profile issue are not heard from because they are engaged day-to-day in the unsensational work of research and regulation. Instead, self-appointed experts and activist journalists can have an enormous impact on the public discussion because they are skilled at creating narratives that showcase findings that are either unrepresentative or false in order to instill fear.

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## Appealing to fear and relying on one-sided narratives

A recent example of this kind of journalism is an [article](#) posted on *The Guardian* website in July 2022 written by activist journalist Carey Gillam. In her article she purported to provide evidence that the herbicide glyphosate is present in urine samples at dangerous levels.

# 'Disturbing': weedkiller ingredient tied to cancer found in 80% of US urine samples

If you are not familiar with Gillam — a [controversial former journalist](#) who long worked for the anti-biotech, anti-vax-funded US Right to Know — here is a profile. She often writes for Children's Health Defense's The Defender, Robert F. Kennedy, Jr.'s anti-vaccine disinformation site [Read: "[How Robert F. Kennedy, Jr. Became the Anti-Vaxxer Icon of America's Nightmares](#)" in Vanity Fair].

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Gillam is also on the payroll of the anti-vax/anti-biotech [Environmental Working Group](#), which is best known for its annual "[Dirty Dozen](#)" list of fruits and vegetables that it falsely claims pose a danger to health. EWG, a political lobbyist organization operating under the guise of an educational nonprofit,

promotes the consumption of organic foods. The group is almost entirely funded by the organic foods industry.

In analyzing Gillam's misrepresentations, [I wrote](#):

What is most noteworthy about her piece is, as we will see, how she packed so many distortions into such a short article.

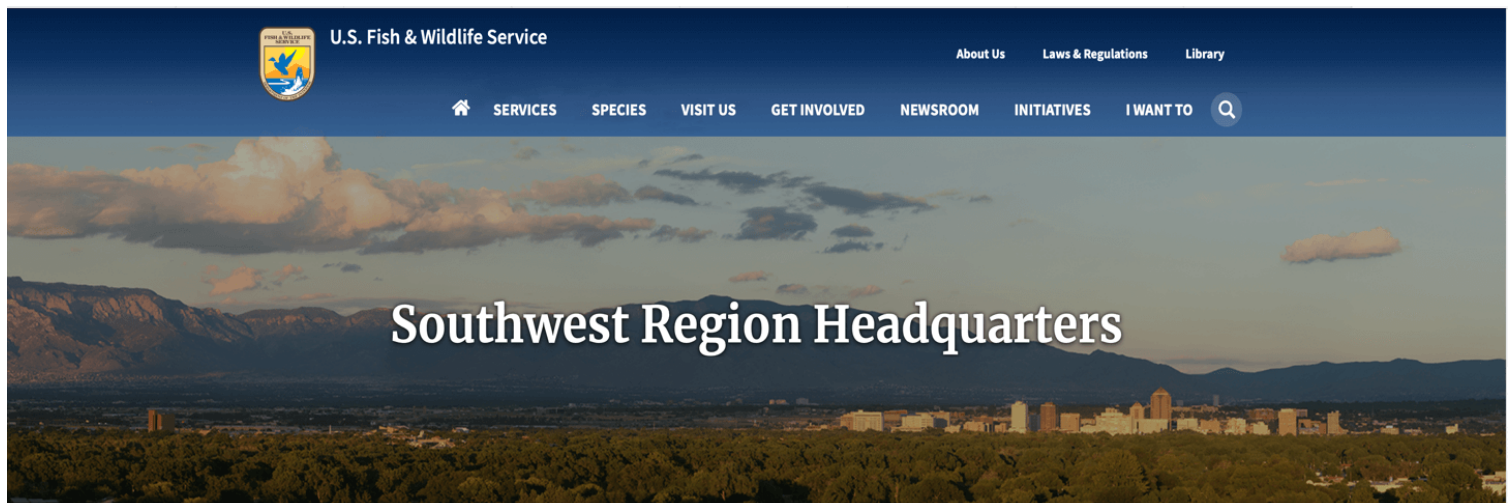
University of Florida horticulturalist Kevin Folta and Genetic Literacy Project executive director Jon Entine both wrote about Gillam's errors and her ties to groups associated with the organic foods industry and opposed to pesticides and vaccines ([here](#) and [here](#)).

The three of us then wrote a letter to the editor-in-chief and two science editors at *The Guardian* highlighting the main points of our critiques, including her shady history. We never received a reply.

## Engaging controversial claims

Recently, in cleaning out my files, I came across an email letter I received in response to an [article](#) I wrote about glyphosate on Forbes.com in 2017. It was from April Fletcher, a retired Refuge Program Specialist in the Division of Refuges of the U.S. Fish and Wildlife Service, in Albuquerque, New Mexico. It was so out of the ordinary, so different in tone and substance from the comments I routinely received from readers, which range from accusing me of being a shill of industry to agreeing with my assessment based on the scientific literature.

What distinguished Ms. Fletcher's letter is that she had spent 18 years reviewing pesticide use proposals for the U.S. Fish and Wildlife Service, National Wildlife Refuges in the Southwest Region; in other words, she was knowledgeable about agriculture and wildlife, and she understood the proper use of pesticides.



In her letter, she discussed the appropriate use of glyphosate, but, as an informed wildlife specialist, she also addressed concerns, including the overuse of glyphosate by some farmers. She further opined on GMO crops, the ostensible link between glyphosate and non-Hodgkin's lymphoma, and the growing problem of pesticide resistance. Finally, she referred to the history of DDT, which she thought might be an

appropriate parallel to today's furor over glyphosate.

All in all, her letter showed how one can explain a complex issue in everyday, intelligible language, acknowledging both the pros and cons, discussing potential alternatives to the chemical in question, and putting questions regarding health and safety in perspective.

## **April Fletcher's letter**

I regret that, at the time, I didn't highlight portions of Ms. Fletcher's letter. Below, I quote at length from it and also my response.

*I want to commend you for your intelligent, fact-based article on glyphosate in Forbes. Such articles are becoming a rarity these days! I spent 18 years reviewing pesticide use proposals for the US Fish and Wildlife Service, National Wildlife Refuges in the Southwest Region. Although I had cut my pesticide teeth on Rachel Carson's "Silent Spring," I had to learn a great deal about pesticide risks in order to make intelligent decisions about what pesticides would be safe for wildlife, the land, and people and could be allowed on wildlife refuges and on refuge cropland: We had cooperative farmers that provided crops for wildlife in return for being permitted to grow for their own use or sale. Without being able to use pesticides, we could not have found farmers willing to grow crops for wildlife.*

*I watched the whole glyphosate controversy develop over a number of years before I retired in 2009. It became obvious to me that a great deal of the so-called "research" on the "dangers" of glyphosate was done by people who had little to no understanding of or regard for pesticides, pesticide regulations, pesticide application methods and labels. (I see the same thing in the "experts" in courts these days!) For example, one "researcher" used a glyphosate product that was labeled only for land use to test toxicity of glyphosate to organisms in water. And, if I remember correctly, he paid no attention to the label application rate either.*

*As for the links with non-Hodgkin's lymphoma when the research first came out, I looked up the incidence of the disease around the country, and it became obvious to me that there would be no way of separating exposure to glyphosate from exposure to other pesticides and farm chemicals. The greatest number of cases at that time appeared to be in the Lower Rio Grande Valley, and, if I remember right, in California, where massive amounts of all kinds of pesticides and farm chemicals were being applied. I came to the conclusion that those opposed to glyphosate were trying to completely discredit it because it was one of the safer pesticides. If they could discredit glyphosate, they could discredit all other pesticides.*

*I do have problems with GMO crops and the use of massive quantities of glyphosate, if only because of the real danger of creating glyphosate-resistant weeds, requiring the application of even MORE glyphosate, or more toxic herbicides.*

*I admit I also have problems with the use of glyphosate as a defoliant, a practice that apparently leaves residues on food crops. It just seems like an unwise thing to do. It harkens back to the days of DDT, where salesmen would go and drink DDT to show how “safe” it was (safe, yes, as long as they didn’t consume any fats while it was going through their intestinal tracts!).*

*Glyphosate is a good product that has a track record of safety in the field. That said, I do believe it is getting misused, like DDT was, however, and that mis-use IS being promoted by pesticide manufacturers to increase sales profits. I guess I hold to the belief that “too much of anything can be harmful.” I find the massive use of glyphosate particularly unfortunate because it simply gives those who are trying to get glyphosate completely banned fodder to fuel their battle. And we can see the results of that in Europe these days.*

*I tell you all this to let you know I come from a position of knowledge and objectivity, as you clearly do. And I appreciate your willingness to speak out and try to correct the record! Thank you again for your thoughtful, factually accurate, and objective article. I hope it is widely read!*

## **My response to April Fletcher**

*Dear April,*

*Thank you very much for your thoughtful letter. It’s not usual for me to get feedback from someone who actually has knowledge and practical experience relevant to an exposure which is in the news. I really appreciated the questions you raise about overuse of glyphosate and the danger of creating glyphosate-resistant weeds. And I agree with your comments about DDT. DDT is, as you indicate, an invaluable tool, particularly, in tropical regions of Africa and elsewhere. Like any chemical, it needs to be used appropriately. The banning of DDT in the 1970s and pressure brought to bear on developing countries to stop using it is believed to have been responsible for millions of deaths from malaria.*

*It’s so important to be able to discuss these kinds of issues regarding the appropriate use and trade-offs, rather than remaining on the simplistic level of asserting that glyphosate is either the end of the world or is free of any problems. But more mature and nuanced conversations tend to get drowned out in these over-heated public controversies.*

*Thanks again for writing!*

*Geoffrey Kabat*

The farmers who grow our food, horticulturalists, and wildlife specialists, like April Fletcher, have a wealth of hands-on knowledge concerning agriculture and maximizing soil health and crop yields. This is a very different kind of knowledge from that offered up by activist journalists or environmental lobbying groups. Like Carey Gillam, the latter often seize on isolated factoids to instill fear and gain supporters. When challenged on substantive points, their only response is to allege collusion with industry and “conflict of interest” — ironic, of course, as their income, like Gillam’s, is heavily dependent on the

[extremist wing](#) of the anti-biotechnology movement [and anti-vaxxers](#).

For those engaged in agriculture, from farmers to scientists, it's a matter of self-respect and survival to keep abreast of the relevant findings from many disciplines, including plant biology, soil health, wildlife, and toxicology, all of which directly affect their land, yields, and livelihood.

As educators, we need to drive home the distinction between opinions and observations that are based on practical experience, as well as scientific understanding, and opinions and observations that are presented as pronouncements about science but that come from people with political and ideological motivations.

Not all claims to “knowledge” are created equal.

**Geoffrey Kabat is a cancer epidemiologist and the author of [Getting Risk Right: Understanding the Science of Elusive Health Risks](#). Find Geoffrey on Twitter [@GeoKabat](#)**