

Written testimony for ZTA-2201

From: Sandra Crowe, Montgomery County resident since 1990

We think of pollution in an air context. It's something we see, identify, and can almost touch. We know it's there. With wireless pollution it's not so simple. It's there, but because we don't see it or feel it, so we don't think of it as pollution. In fact we don't think of it at all. But one of the best indicators of this presence in our lives is its' impact on nature, in particular those closest to the ground... insects.

As cited by the American Bee Journal (2/22)...“Up until recently, the range of frequencies used for wireless communication has not risen above 6 GHz (2G, 3G, 4G, and WiFi). The impending deployment of the new and highly anticipated 5G technology utilizes a signal of 120 GHz. Research on insects showed that as the power density of frequencies above 6 GHz increased, the power absorbed by the invertebrates studied increased from three to 370 percent (Thielens et. al. 2018) making the importance of being able to understand the potential threat to pollinators from electromagnetic radiation all the more urgent”

In addition, The research review [“Electromagnetic radiation as an emerging driver factor for the decline of insects”](#) published in Science of the Total Environment found “sufficient evidence” of effects including impacts to flight, foraging and feeding, short-term memory and mortality. ([Balmori 2021](#))

But it doesn't stop there. Even flora and fauna are affected. A landmark [research review](#) by U.S experts of over 1,200 studies on the effects of non-ionizing radiation to wildlife entitled “Effects of non-ionizing electromagnetic fields on flora and fauna” published in Reviews on Environmental Health found adverse effects at even very low intensities including impacts to orientation and migration, reproduction, mating, nest, den building and survivorship. (([Levitt et al., 2021a](#), [Levitt et al., 2021b](#), [Levitt et al., 2021c](#)).

In addition...“[A review of the ecological effects of RF-EMF](#)” published in Environment International reviewed found RF had a significant effect on birds, insects, other vertebrates, other organisms, and plants in 70% of the studies reviewed with development and reproduction in birds and insects the most strongly affected. ([Cucurachi 2013](#)).

Why do we have our hands over our ears and eyes when it comes to the dangers of this exposure not only to humans, but to nature and the environment? There is so much we cannot control and this is something we can. Many countries such as Italy, Switzerland, Israel, China, Russia, and India, have more stringent cell tower radiation limits (10 to 100 times) compared to the U.S. FCC and ICNIRP. In fact, India dropped their RF limits by 1/10th in 2012 after an Inter-Ministerial Committee set up by the Ministry of Environment and Forests [reviewed the research](#) on birds, bees, plants and animals and found 593 of the 919 showed impacts as [summarized](#) in the journal Biology and Medicine. FCC safety standards have not been updated or changed since 1996 while the technology has grown and shifted at a rapid pace since then. How do we know the real impact of long term exposure?

A 30 foot set back is an indirect attack to wildlife, our eco system, let alone our children and future generations. Why would we want to impose this on them? We still have some control over how much wireless pollution we emit into the air. We still have the chance for a layer of protection against this. This is an opportunity for you to step up and not contribute to an already growing problem. Say no to ZTA-2201 while you can, for now and for our collective future.