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Thank you for taking the time to read my comment which hopes to relate the effects of man-made RF/EMF on flora and fauna in a brief comment. Biological harms are evidenced in migratory and feeding patterns of birds and bees due to man-made Extra Low Frequency RF/EMF. Birds use magnetite to sense the Earth's magnetic field in order to follow their sense of direction when migrating (Hore, Mouritsen, 2022). Additionally, they use these receptors to find their breeding grounds and maintain their hives; as well as source food and pollinate. It has been shown that their productivity diminishes greatly with man-made Electromagnetic Radiation in studies regarding high voltage towers. One such study mimicked high voltage towers (6 towers operating between 50 Hz or 60 Hz, which is considered ELF). It was noted that bees would avoid the areas with artificial RF/EMF thus leading to lack of feeding and would ultimately be the cause for colony collapse. The bees would also lose the ability to return to the hive due to their remote sensing failure. When analyzed, the bees had a Heat Shock Protein value 50% higher when the colony was maintained near the towers versus the colonies not exposed to man-made RF/EMF (Science Advances Vol. 9, Issue no. 19). So, what we have here are bees not pollinating plants which need to be pollinated as well colony collapse from bees unable to return to the hives. If plants aren't getting pollinated, we are not growing food and habitat for other insects to survive. Our entire food chain relies on bees and pollination.

Numerous studies have linked the decline of biodiversity in wildlife as well as extinction prevalence due to the introduction of ELF (extra low frequency range of 3Hz-30Hz). There are varying frequencies made by man which interfere on this level and thusly cause a form of pollution that is indeed, affecting wildlife. The guidance system of animals for hibernation, feeding, mating, and migration are dependent upon the natural patterns of the planet. What we have found in the last 40+ years, since 1984 is a rapid acceleration in species decline and it coincides with the rapid expansion of ELF/RF/EMF. Although these forces are not our only cause, they are indeed a major culprit. Power lines are part of the ELF but there are many other sources such as wireless routers, cell-phones, security systems, baby monitoring devices and SMART technology. These sources influence the shapes of the frequency modulations making it more impactful (Levitt et al, 2022).

One of the most important drivers of animal and plant behavior involves the Schuman Resonance. The Schumann Resonance has been studied for over 100 years but was finally authored with mathematical representation by Otto Schumann in 1952. The Schumann Resonance is caused by the interaction of lightning on Earth's surface within the ionosphere. It influences the behavior patterns and physiology of animals and this includes humans (NASA, 2021). With its absence in space, astronauts experience degrading effects on their bodies which prevents them from long stays. Thus, they are looking to introduce a means of replicating the Schumann Resonance for longstanding journeys. All this to say, it

has been proven that man-made ELF and EHF (Extra High Frequencies) are interfering with the Schumann Resonance, which serves as guidance for many species, including humans.

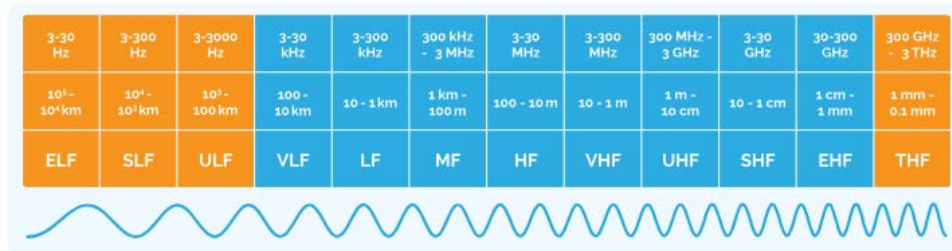


Figure: Tektelik

Even the NIH proposes that more study needs to be completed due to the magnificent explosion of Wi-Fi, Cellular technology and other sources of RF/EMF. In a response published in 1999, the NIEHS determined a significant increase in malignant cancers in rats when exposed to sustained frequencies of 900MHz and that was the response report written for the Energy Policy Act of 1992 (NIEHS, 1999). Man-made EMF was barely in existence at this time, even at the low frequencies and it was determined that further study was warranted. So flash forward into 2026, where are we now? We are inundated with technology on every frequency possible. It is very important to determine safe operating levels and investigate risk reduction strategies wherever possible for our wildlife and ourselves. We have the opportunity now to reevaluate the last 30 years and see how we can improve. I, and many many others, appreciate your review of these standards.

