Do Cell Phones Affect the Food Supply?

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Cell phones have come a long way since the first clunky models debuted more than half a century ago. And like all developing technology, cell phones have had their share of critics, such as those who claim cell phone usage causes cancer. The latest cellular scare sounds particularly interesting, if somewhat outlandish: Cell phones may be killing the honeybees [1].

The fact that bees are dying off is not news in itself. Colony collapse disorder, the phenomenon in which bees abandon their hives, has been a widespread problem for a while now. According to the <u>U.S. Department of Agriculture</u> [2], 29 percent of bee colonies were lost during 2009, with that percentage rising to 34 percent in 2010.

From a completely selfish standpoint, the diminishing population of bees doesn't sound like such a bad thing if it means the decreased chance of a bee sting. But when push comes to shove, colony collapse disorder may be one of the most critical problems facing the agricultural and food industries.

Bees have a heavy workload; they are responsible for pollinating much of the world's food crops, so fewer bees mean less pollination, which, ultimately, could turn into a weakened food supply. The USDA estimates that bees pollinate about one-third of food crops, including fruits, vegetables and nuts.

The biggest mystery surrounding colony collapse disorder is what causes it. Scientists have so far been unable to determine the exact reasons for the catastrophe, but that's not to say that there aren't some interesting theories.

One of the most prevalent ideas is that chemicals used by commercial beekeepers are at fault. Many beekeepers use chemicals and antibiotics to control mites and stress, but some scientists argue that these chemicals, combined with other

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traditional practices of commercial beekeeping, contribute to colony collapse disorder.

"Bees are stressed when they're transported thousands of miles and not allowed to leave the hive," says Eric Mussen [3], a honeybee expert at UC Davis. "When they get there they're fed corn syrup and artificial pollen." While Mussen maintains that he is not trying to vilify the commercial beekeeping industry, he says current practices aren't sustainable.

One scientist is making his own bold suggestion for the cause of the bees' demise. A recent study by <u>Daniel Favre at the Swiss Federal Institute of Technology</u> [4] is claiming that the cell phones we use everyday may be partially responsible.

According to Favre, using cell phones near bees has a "dramatic effect." The electromagnetic pulses transmitted by the cell phones cause such disruption and confusion among the insects that they eventually abandon their hive without returning.

Of course, the study has its fair share of naysayers, and even Favre admits his study has limitations. Generally speaking, cell phones are rarely in close vicinity to hives, so further research is needed to assess the risk of cell phone signals further away from the bees.

Whether it is chemicals or cell phones that are harming the bees, the fact remains that much of the food industry needs the bees in order to thrive. Without pollination, many plant foods could potentially become scarce, including berries, coffee and cocoa. Food manufacturers who rely on these ingredients for their products may find themselves paying more money for less product.

Studies like Favre's may have their flaws, but they do provoke some deep thoughts and make for an interesting debate. Despite whether you give any credit to Favre's study, you may just find yourself checking to see if there are any bees nearby next time you pull out your cell phone.

Do you think food manufacturers should be concerned about colony collapse disorder? Let me know at lindsey.coblentz@advantagemedia.com [5].

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