



an has always had a fascination with the birds and the bees, traditionally linked to reproduction and food. Now the fascination is turning to concern, if not horror. Why?

The birds and bees are disappearing. Over the winter of 2006/7, bee populations have plummeted so drastically that the decrease is being referred to as Colony Collapse Disorder [CCD].

CCD is characterized by the outright disappearance of bees, rather than piles of dead bees in the hives, as would be the case if they died of pesticides, viruses or parasites. Strangely, while the bees are disappearing, the queen and capped brood are left behind. Usually, when bees swarm, they take the queen with them to form a new hive. They also don't normally leave until the capped brood is hatched.

It appears that the bees leaving the hive are intending to come back, but lose their ability to navigate and communicate. Since their food is stored in the hive, the bees are most likely starving or succumbing to the elements. What is also quite strange is that their virtually empty hives are not being plundered by other colonies or scavenging insects.

Bee die-off

Normal winter bee die-off is 10 to 20 percent. Beekeepers around the world are reporting sudden die-offs of up to 90 percent of their hives. Should this concern us? Most definitely. Bees are crucial to crop pollination and a vital part of our agriculture and food production—approximately 80 percent of crop pollination is done by bees.

Concerned scientists are urgently trying to find the cause of CCD. Suggested causes include the Varroa mite, viruses, pesticides, GM crops, and climate change. When viewed as an epidemic, however, the spread pattern is not consistent with anything biological or chemical. The spread has been so rapidly global that it has to be caused by something introduced globally.

Are cell phones responsible?

According to Dr. George Carlo, who ran the North American wireless

industry's six-year, \$28.5 million research program, the culprit in the disappearing birds and bees threat is the Information Carrying Radio Waves [ICRW] spread worldwide by cell phone antennae and other wireless transmissions. Carlo is convinced that the ICRW interfere with intercellular communication in all living things, harming the bees' navigation as well as their immune systems.

A series of studies by Wolfgang Harst, Jochen Kuhn and Hermann Stever at Landau University, in Germany, demonstrated the effect of pulsed, digital radiation. In their study, two beehives were unexposed and two beehives were exposed to a cordless DECT phone [Digital European Cordless Telecommunications]. Twentyfive bees were selected from each hive and released 800 meters away. In the unexposed hives 16 and 17 bees returned in 28 and 32 minutes respectively. In the DECT-exposed hives six bees returned to one in 38 minutes. and none returned to the other hive at all. In the exposed hives, there were 21 percent fewer cells constructed in

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the hive frames after nine days.

In April of this year Dr. Ulrich Warnke, of the University of Saarland, did a review of his and other studies in this matter and concluded that, "Orientation and navigation of bees may be disturbed by man-made technical communication fields."

As it turns out, previous theories that bees rely solely on the sun for orientation are incorrect. Bees have an internal compass containing a type of mineral called magnetite in their abdomens, which helps them navigate by using the earth's electromagnetic fields. Birds also have magnetite in their brains and beaks, which normally helps them with orientation. The increasing amounts of electrosmog is throwing them off.

Missing birds

Like bees, birds are also disap-

pearing. A study of sparrows, from the Research Institute for Nature and Forest in Belgium, measured 150 locations and found that the stronger the signal from base stations, the fewer sparrows in the area.

There have been a growing number of reports of homing pigeons becoming lost during races, and never returning home. An article in the Vancouver Sun newspaper (October 3, 2005) quoted Tony Correia, President of Victoria's Capital City Racing Club, saying that in 30 years of pigeon racing he had not seen losses as great. Racing pigeons are trucked up to 960 kilometers from their homes and released. In the past, up to 15 percent of pigeons were lost in races due to predators, bad weather, or poor conditioning. In the 2005 race, however, more than 1,000 birds, or 85 percent, never returned. Correia blames cell phone transmitters, which he says his pigeons appear to avoid whenever possible.

Since cell phone towers have been around for more than 20 years, why would this be causing problems with birds and bees now? According to Dr. Carlo, our environment has reached the saturation point for ICRW. He referred to a school science demonstration in which drops of red dye are dropped into a glass of water. The water appears clear until reaching the saturation point, when it suddenly turns red. According to Dr. Andrew Michrowski, president of the Planetary Association for Clean Energy, measurements taken in Toronto demonstrate that the background radiation has increased 500,000 fold since 1999.

Like the canary in the coal mine, this disappearance is a harbinger of danger. Fortunately, this can empower us to act before it is too late. There is proven technology available to mitigate this problem but we have to act now. Unfortunately, health authorities are still in denial about the reality that Information Carrying Radio Waves are a health concern, and agriculture authorities continue to look elsewhere for the answer.

HANS consultant and member Milt Bowling is President of the Clean Energy Foundation (www.cleanenergycanada.com), which works with the public, industry and government for better regulation and safer technology. Contact information for Milt is in the HANS Wellness Directory at www.hans.org.

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