

What's Really Causing Honeybee Colony Collapse Disorder (CCD)?

by Jim McKinley, May 15, 2013

Updated March 9, 2014

Introduction

During the winter of 2006-2007, some beekeepers began to report unusually high losses of 30-90 percent of their hives. As many as 50 percent of all affected colonies demonstrated symptoms inconsistent with any known causes of honeybee death: sudden loss of a colony's worker bee population with very few dead bees found near the colony. The queen and brood (young) remained, and the colonies had relatively abundant honey and pollen reserves. But hives cannot sustain themselves without worker bees and would eventually die. This combination of events resulting in the loss of a bee colony has been called Colony Collapse Disorder (CCD).¹²



CCD was a major topic of bee loss for a few years, then it seemed to fade while pesticides and disease became the major culprits. This is exemplified by a recent article in Wired.²¹

Scientists have raced to explain the losses, which fall into different categories. Some result from what's called colony collapse disorder, a malady first reported in 2006 in which honeybees abandon their hives and vanish. Colony collapse disorder, or CCD, subsequently became a public shorthand for describing bee calamities.

Most losses reported in the latest survey, however, don't actually fit the CCD profile. And

though CCD is largely undocumented in western Europe, honeybee losses there have also been dramatic. In fact, CCD seems to be declining, even as total losses mount. The honeybees are simply dying. [emphasis added -Ed.]

"Even if CCD went away, we'd still have tremendous losses," said entomologist Diana Cox-Foster at Pennsylvania State University. "CCD losses are like the straw that breaks the camel's back. The system has many other issues."

Current focus is on pesticides as the primary cause of bee losses although it is difficult to find any hard scientific data to support this claim. None the less there is a broad movement to implicate pesticides.^{16,17,18}

No doubt pesticides are harmful to honeybees -- and most other biological entities including humans. Data show that there may be a more disquieting and insidious cause of CCD.

Dead bees don't necessarily mean CCD

Honeybee demise can be attributed to several causes. CCD is one that has specific symptoms as defined by the EPA:¹⁹

"There have been several incidents of acute poisoning of honeybees covered in the popular media in recent years, but sometimes these incidents are mistakenly associated with CCD. A common element of acute pesticide poisoning of bees is, literally, a pile of dead bees outside the hive entrance. With CCD, there are very few if any dead bees near the hive. Piles of dead bees are an indication that the incident is not colony collapse disorder. Indeed, heavily diseased colonies can also exhibit large numbers of dead bees near the hive. [emphasis added -Ed.]

The "Official" Story

The latest "official" reporting on investigations into honeybee disappearance and CCD point for the most part to neonicotinoid pesticides.

The USDA Action Plan June 2007

In June of 2007, the USDA issued its Colony Collapse Disorder Action Plan¹³. Some of the statements in it are curious [emphasis added].

"Suspected causes include the following four factors: 1) environmental and nutritional stresses (e.g., spring foraging followed by a cold weather period of 3 to 9 days, exposure to long periods of drought, inadequate nutrition, and migratory management practices); 2) new and/or re-emerging pathogens; 3) pests that attack bees; and 4) pesticides.

"Several other factors have been suggested as causal mechanisms of CCD, for example, the use of genetically modified (GMO) crops. However, large bee die-offs have also occurred in Europe, where GMO crops are not widely grown. Also, in the United States, the patterns of CCD-affected colonies do not appear to correlate with the distribution of GMO-crops such as Bt-corn. Furthermore, extensive laboratory and field testing has indicated a lack of acute and sub-lethal effects on bees exposed to GMO-pollen.

"Other hypotheses are even less likely. For example, based on misleading news reports, the public has become concerned that cell phone use may be causing bee dieoffs;

however, scientists have largely dismissed this theory because exposure of bees to high levels of electromagnetic fields is unlikely. Similarly, shifts in the Earth's magnetic field, which could conceivably affect bee navigation, have not been correlated with bee die-off episodes, but cannot be completely ruled out at this time."

May 2012 EPA Update

In May 2012, the EPA reported on their web site¹² that:

"When most or all of the bees in a hive are killed by overexposure to a pesticide, we call that a beekill incident resulting from acute pesticide poisoning. But acute pesticide poisoning of a hive is very different from CCD and is almost always avoidable."

"A common element of acute pesticide poisoning of bees is, literally, a pile of dead bees outside the hive entrance. With CCD, there are very few if any dead bees near the hive. Piles of dead bees are an indication that the incident is not colony collapse disorder. Indeed, heavily diseased colonies can also exhibit large numbers of dead bees near the hive."



"Why it's happening

There have been many theories about the cause of CCD, but the researchers who are leading the effort to find out why are now focused on these factors:

- *increased losses due to the invasive varroa mite (a pest of honeybees);*
- *new or emerging diseases such as Israeli Acute Paralysis virus and the gut parasite Nosema;*
- *pesticide poisoning through exposure to pesticides applied to crops or for in-hive insect or mite control;*
- *bee management stress;*
- *foraging habitat modification*
- *inadequate forage/poor nutrition and*
- *potential immune-suppressing stress on bees caused by one or a combination of factors identified above."*

"What EPA is doing

Our role in the federal response to CCD is to keep abreast of and help advance research investigating pesticide effects on pollinators. To date, we're aware of no data demonstrating that an EPA-registered pesticide used according to the label instructions has caused CCD."

[Note that the EPA will keep abreast and advance research, but not take a proactive role. And they state there is no data demonstrating that EPA-registered pesticides have caused CCD.]

USDA Colony Collapse Disorder Progress Report - June 2012

The progress report¹⁴ states: [emphasis added -Ed.]

"A survey of bees, honey, and comb for the presence of 170 pesticides or pesticide residues performed in 2010 did not find any pattern of exposure that correlated with CCD incidents, which would be expected if pesticides were a major factor in causing CCD."

"A series of colony samples collected from throughout the United States in 2006 and 2007 was further analyzed using DNA sequencing in an effort to detect the presence of exotic or novel pathogens that might have been overlooked in studies that were conducted in 2007.

"Analysis of a broad set of healthy and CCD-affected hives did not reveal a sole causative agent but rather a host of viral, bacterial, and fungal pathogens that occurred at higher levels in CCD-affected hives.

"Recent efforts by Cornman and colleagues did not identify a single unique pathogen that could be a CCD causative agent, but the data did lend support to earlier studies suggesting that whereas a complex set of pathogens may be involved in the cause of colony losses, no single pathogen can be solely linked to CCD."

So the USDA is saying that pesticide exposure is not correlated with CCD but a complex set of pathogens might be.

Survey of Bee Losses During Winter of 2012/2013

The USDA Agricultural Research Agency in reporting its annual Survey of Bee Losses²⁴ made the following points:

- One difference noted this winter was that there were more colonies that dwindled away, rather than suffering from the onset of Colony Collapse Disorder (CCD), where colony populations are lost suddenly.
- Beekeepers did not report CCD as a major cause of colony loss this past winter, which follows the previous year's trend.

The Media Chimes In

That takes us to this interesting Forbes/CNN item¹⁵ from 2010:

"A cheer must have gone up at Bayer on Thursday when a front-page New York Times article, under the headline "Scientists and Soldiers Solve a Bee Mystery," described how a newly released study pinpoints a different cause for the die-off: "a fungus tag-teaming with a virus." The study, written in collaboration with Army scientists at the Edgewood Chemical Biological Center outside Baltimore, analyzed the proteins of afflicted bees using a new Army software system. The Bayer pesticides, however, go unmentioned.

"What the Times article did not explore -- nor did the study disclose -- was the relationship between the study's lead author, Montana bee researcher Dr. Jerry Bromenshenk, and Bayer Crop Science. In recent years Bromenshenk has received a significant research grant from Bayer to study bee pollination. Indeed, before receiving the Bayer funding, Bromenshenk was lined up on the opposite side: He had signed on to

serve as an expert witness for beekeepers who brought a class-action lawsuit against Bayer in 2003. He then dropped out and received the grant."



Jerry Bromenshenk, bee investigator

An Interesting Study From France

"...Mickael Henry and his team at the French National Institute for Agricultural Research in Avignon, France, tagged free-ranging honeybees with RFID, or, radio-frequency identification microchips, and gave some of the bees a sublethal dose of thiamethoxam, another common systemic pesticide used on cotton, cherries, strawberries, and tomatoes. The research team found that the 'treated bees were about two to three times more likely to die while away from their nests.' It is believed that the bees died because the pesticides interfered with the bees' ability to navigate their way back home."²⁵ [emphasis added -Ed.]

Summarizing The Official Story

What we glean from the Official Story is the following:

- GMO crops are not to blame
- EPA-approved pesticides are not to blame
- cell phone are not to blame -- scientists have dismissed this theory because exposure of bees to high levels of electromagnetic fields is unlikely
- the presence of 170 pesticides or residues showed no pattern of exposure that correlated with CCD incidents, which would be expected if pesticides were a major factor in causing CCD
- a host of viral, bacterial, and fungal pathogens may be to blame
- a complex set of pathogens may be to blame
- a fungus tag-teaming with a virus may be to blame
- more colonies dwindle away rather than suffering from the onset of Colony Collapse Disorder
- beekeepers did not report CCD as a major cause of colony loss

Indeed, it seems as if the CCD problem is being downplayed. Or is it so complex that it may be difficult to solve (without lots of time and money?).

And it is difficult to impossible to find a scientific report, with hard data and showing results, from one of the studies mentioned in the Official Story.

Smart Meters Provide a Clue

In our Newsletter No. 35 of January, 31, 2013¹, we had an article on the effect of electromagnetic radiation -- also called EMR or "electrosmog" -- on honeybees, indicating that it might be responsible, at least in part, for the honeybee decline.

One of the references cited in that report² stated:

"Smart Meters WILL be the nail in the coffin for bees, for heirloom seeds/plants and all cells within creation that they touch if we don't stop them. Many of the people looking into CCD have a very closed mind. "It is only this," "it is only that," "there is no other factor but X." Therefor, even posing that smart meters ... kill bees, and mutate seeds causes a stir for some.

"It is as if somehow all the laws that show death and disease in humans and animals ... do not apply to bees or plants. All things in creation obey laws and are really the same."

With the forced installation of Smart Meters in Anglo-American countries, the effects of electrosmog has risen to public awareness. People are now noticing and publicizing their observations on radiation dangers.^{9,10} The observations correlate to long-known government information.

Bees in Marin County impacted by PG&E Smart meters



Watch the video here: <http://www.youtube.com/watch?v=kl0JJgKkyzs>

Smart Meter Killing Shrub



Watch the video here: http://www.youtube.com/watch?v=lsuP_WBBr2c

Ignored Research

Using the reported affects of smart meters as a clue, it doesn't take much research to find documented studies of the effects of electromog on natural biological entities -- humans, animals, plants and insects including honeybees. Why is this research not included in the "Official Story"?

The effect of cell phones

In 2005, a group of scientists of the University of Koblenz-Landau in Germany headed by Prof. Hermann Stever conducted a pilot study to research the 'returning behavior' of bees under the influence of electromagnetic radiation.²³ Four out of eight colonies were exposed to DECT phone base stations which were put into the hive and constantly emitted radiation.

In order to examine the "returning behavior", various bees of each hive were marked with color dots and released at a distance of 800 meters to the hive after a minimum DECT exposure period of five days. There were significant differences in the time needed for returning to the hive between the "exposed" and "unexposed" bees, shown in the figure.

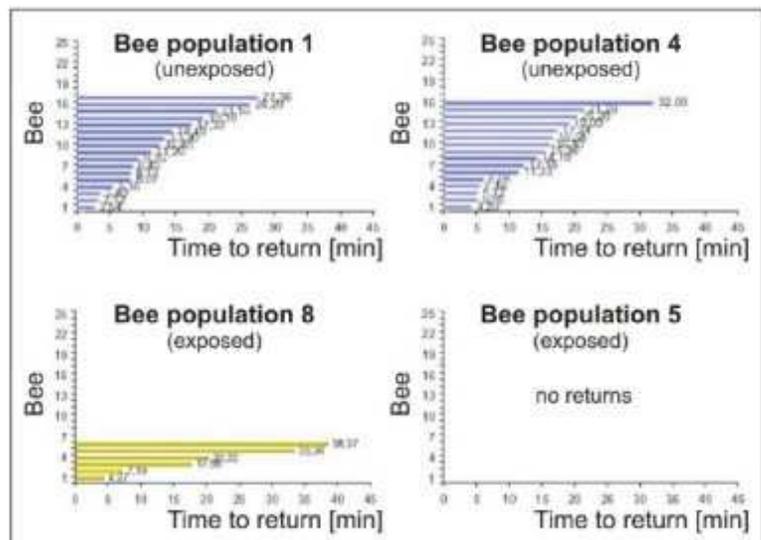


Fig. 3: Return times of sample colonies with and without DECT phone in the hive. A total 40% of bees from "unexposed" hives returned to their hive, whilst only 7% of "exposed" bees returned [15]. Chart taken from [10].

There were significant differences in the time needed for returning to the hive between the "exposed" and "unexposed" bees, shown in the figure.

In 2010, just as the deployment of smart meters was ramping up, Sainudeen Saib.S reported on his work in determining the effect of electromagnetic radiation from cell phones on honeybees.²⁰ In the report introduction he states:

Bees and other insects have survived and evolved complex immune system on this planet over a span of millions of Years. It is not logical that they would now suddenly die out now (sic) due to diseases and natural parasites. This suggests another factor has been introduced to their environment that disrupts their immune system. This man made factor is the mobile towers and mobile phones.

The public is not being informed of the threat due to deliberate attempts on the part of mobile phone makers to mask the direct causal relationship. Over the past several months a cadre of scientists, funded by the deep pockets of the mobile phone industry, has suggested viruses, bacteria, and pesticides are to blame for the unprecedented honey bee decline. Rather than critically assessing the problem, the industry is dealing with it as a politics and public relation problems thus manipulating perception of the appropriate remedy. ... If the reason behind the population decrease were biological or chemical there would be a pattern of epidemic spread. Observers would be able to trace the spread of bee disappearance from a source similar to the spread of SARS a few years ago. This pattern did not occur, however mobile towers and mobile phones meet the criterion. [emphasis added -Ed.]

New experiments suggests a strong correlation between population decline and cellular equipment. The massive amount of radiation produced by towers and mobile phones is actually frying the navigational skills of the honey bees and preventing them from returning back to their hives. The thriving hives [are] suddenly left with only queens, eggs and hive bound immature worker bees. Thus electro magnetic radiation exposure provides a better explanation for Colony Collapse Disorder (CCD) than other theories. The path of CCD ... has followed the rapid development of cell phone towers, which cause atmospheric electromagnetic radiation.

Sainudeen used six colonies of honey bees; three colonies were selected as test colonies and the rest were as control. The test colonies were provided with mobile phones in working conditions with frequency of 900 MHz for 10 minutes for a short period of ten days. The control colonies had not provided (sic) with mobile phones. Queen prolificacy was calculated in terms of egg laying rate of the queen . Flight activity and returning ability were measured as number of worker bees leaving and returning to the hives per minute: before exposure, during exposure and after exposure.

The results are shown in the following table. The rapid decrease in bee activity of the test colonies is evident and the decline in returning ability is symptomatic of CCD.

Table 1: Change in colony status of honeybees exposed to mobile phones

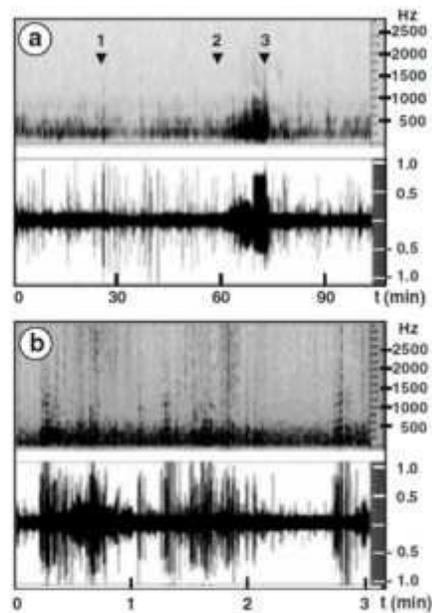
Parameter	Control (mean \pm SD)	Treated (10 m exposure for 10 days.
(No. of worker bees leaving the hive entrance/ minute)		
Before exposure	40.7 \pm 15	38.2 \pm 12
During exposure	41.5 \pm 14	18.5 \pm 13
After exposure	42.4 \pm 14	Nil
Returning ability		
Before exposure	42.5 \pm 15	39.5 \pm 14
During exposure	43.6 \pm 14	15.6 \pm 13
After exposure	44.6 \pm 13	Nil
Bee strength		
Before exposure	9 Frame	9 Frame
During exposure	9 Frame	5 Frame
After exposure	9 Frame	1 Frame
Egg laying rate of queen /day		
Before exposure	365.25	355.10
During exposure	362.15	198.60
After exposure	350.15	100.00

Another study, issued in 2011 by Daniel Favre,²² recorded the effects of cell phone radiation on worker bee piping. In natural conditions, worker piping either announces the swarming process of the bee colony or is a signal of a disturbed bee colony.

In the study, mobile phone handsets were placed in the close vicinity of honeybees. The sound made by the bees was recorded and analyzed. The audiograms and spectrograms revealed that active mobile phone handsets have a dramatic impact on the behavior of the bees, namely by inducing the worker piping signal.

A representative sample of Favre's results are shown in the following audio and spectrograms.

Figure 3. Induction of honeybee worker piping by mobile phone handsets. **a** standby mobile phone handsets in the hive were activated 25 min. after the onset of the experiment (1). The beginning of increased noise and frequency in the hive was observed ca. 35 min later (2) and is indicated by a longer arrow. The cessation of the mobile phone communication is indicated (3). **b** Recording of bee noise in a hive submitted to prolonged (20 h) active mobile phone handsets. Spectrograms are reported in hertz (Hz); audiograms are normalized (n.a. -1 to +1). Time (t) is indicated in minutes.



The induction of honeybee worker piping by the electromagnetic fields of mobile phones might have dramatic consequences in terms of colony losses due to unexpected swarming. The study suggests that active mobile phone handsets in beehives noticeably induce the rate of worker piping.

In a subsequent statement to the press, Favre stated the following:

"Active mobile phone handsets have a dramatic impact on the behavior of the bees, namely by inducing the worker piping signal "

"In natural conditions, worker piping either announces the swarming process of the bee colony or is a signal of a disturbed bee colony"

"For future experiments, in complement to the present original study and in order to reach more "natural" conditions, mobile phone apparatuses should be placed at various increasing distances away from the hives"

"We should ask ourselves, whether the plethora of mobile phone masts also have an impact on the behaviour of the honeybees"

"Among other factors such as the varroa mite and pesticides, signals from mobile phones and masts could be contributing to the decline of honeybees around the world ; I am calling the international scientific community for more research in this field. "

Destroying nature by "electrosmog"



Some of the most thorough research done on the effects of electrosmog on natural biological organisms is that of Ulrich Warnke. It is published in the 2007 brochure "BEES, BIRDS AND MANKIND: Destroying nature by



"electrosmog."¹¹

Here are some excerpts from the publishers preamble:

"The bio-scientist Ulrich Warnke is more familiar with nature's electromagnetic housekeeping than most. In this paper, he shows how wise and sensitive nature was about using electrical and magnetic fields in the creation of life. But he can for this reason also convincingly criticise the present foolish and irresponsible interference in nature's housekeeping. It is clear from his paper that the powers that be in politics, the economy and science are in the process of destroying what nature has built up over millions of years.

The traces of this destruction have long been evident in our living environment.
[emphasis added -Ed.]

"The public is little aware of these risks because they are hardly addressed in the "enlightenment" provided by officialdom and industry. The public is given the assurance that they are well-protected by the limits and the compliance-assuring measurements and that UMTS radiation is as harmless as GSM radiation -- more antennae in residential areas are recommended in principle. And whilst Ulrich Warnke demonstrates how vulnerable man and environment are, we are told that we are more robustly organised than our machines. The original "radiation protection" has deteriorated to the protection of commercial interests.

The involvement of government in industry and the high percentage of industry-financed research and industry-beholden panels and consultants, have spawned a questionable system of environment and consumer protection. Only that which does not seriously endanger common commercial interests is noted and supported. The rights of the citizen to protection and the suffering of the people are flatly ignored." [emphasis added -Ed.]

Here are some excerpts from Warnke's main text:

Biological systems are obviously very sensitive in their reaction to microwave fields. For instance, Belyaev et al, 1996, reported resonance effects on the DNA structure at extremely low power densities of 0.000001 uW/m² in the 40 - 50 GHz frequency range. This surprising result must still be confirmed by other working groups. Nevertheless, it must be stated that: The ultra-weak, but biologically very effective natural electromagnetic fields are contrasting strangely with the technical radiation fields permitted in Germany. On recommendation by the ICNIRP association (Munich), technical radiation fields up to power densities of 10,000,000 uW/m² were legalised -- still considered as harmless by the experts. The population, animals and plants may therefore be legally subjected to radiation in the critical frequency spectrum that is more than 10 orders of magnitude higher than the natural fields.

From Germany:

"A 10% loss over the winter months is not regarded as unusual. What is completely unusual, however, is the statement by the president of the DBIB (German Federation of Occupational and Purchasing Beekeepers), Manfred Hederer,.. "The beehives are empty."

From Switzerland:

" In 2006, the Swiss federal research institute for production animals and dairy farming, Agroscope, (Federal office for agriculture), reported that also all of Switzerland was affected by bee deaths, to a regionally more or less severe degree (Zurichseezeitung, 5. May 2006). Roughly 30 percent of the bees were lost without a trace after winter..."

From Styria:

"The bees are not developing properly anymore. They do survive the winter, but in spring they disappear as if by magic. The hives are simply empty."

"Ferdinand Ruzicka, scientist and beekeeper himself, reports: "I observed a pronounced restlessness in my bee colonies (initially about 40) and a greatly increased urge to swarm. As a frame-hive beekeeper, I use a so-called high floor, the bees did not build their combs in this space in the manner prescribed by the frames, but in random fashion. In the summer, bee colonies collapsed without obvious cause. In the winter, I observed that the bees went foraging despite snow and temperatures below zero and died of cold next to the hive. Colonies that exhibited this behaviour collapsed, even though they were strong, healthy colonies with active queens before winter. They were provided with adequate additional food and the available pollen was more than adequate in autumn. The problems only materialised from the time that several transmitters were erected in the immediate vicinity of my beehives" (RUZICKA, 2003). [emphasis added -Ed.]

"Ruzicka organised a survey through the magazine Der Bienenvater (2003/9):

- Is there a mobile radio antenna within 300 m of your beehives? - This was confirmed in 20 replies (100%).*
- Are you observing increased aggressiveness of the bees compared to the time before the transmitters were in operation? - 37.5% confirmed this.*
- Is there a greater tendency to swarm? - 25% confirmed.*
- Are colonies inexplicably collapsing? - 65% confirmed.*

"Such colony collapses, heralded by "angry" swarming of the bees, were also reported in New Zealand"

Other reasons possibly explaining the disappearance of the bees are also under discussion: Monocultures, pesticides, the Varroa mite, migratory beekeeping, dressed seed, winters too severe, genetically modified plants. There is no doubt that some problems can be attributed to this. But the fairly sudden and countryspanning appearance two to three years ago of the dying bees phenomenon cannot be convincingly explained by any of the aforementioned causes. Should the bees simply be too weak or ill, they should also die in or near the hive. But no ill bees were found in the research into this phenomenon.

In section 3.6, "Bees transmit electrical fields," Warnke presents some results of his research. The material is more than can be accommodated here in its totality, but a few of his

photos and graphs are informative in showing the extent and depth of his work..



Fig. 9: Wing of a bee under a scanning electron microscope. The electrical current pattern was recorded. All the white regions have high electron mobility, whilst the darker areas are highly electrostatically charged due to low electron mobility. Discharge is very difficult.
Warnke 1989, Copyright Ulrich Warnke.

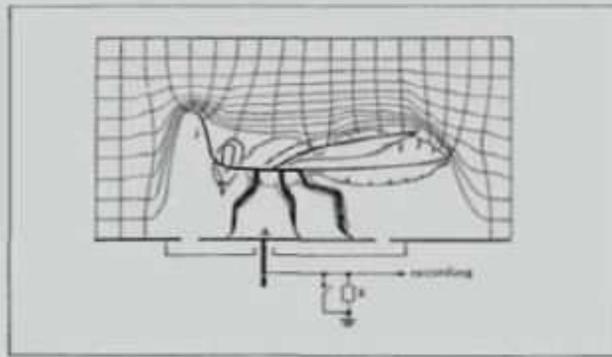


Fig. 11: A bee in an electrical field; top: a construction, bottom: an experiment. It is shown how the field strength increases around certain surface structures.

Warnke 1989, Copyright Ulrich Warnke



*Fig. 12: Bee in flight in an electric field. The fields around the antennae are particularly strong.
Warnke 1986, Copyright Ulrich Warnke*

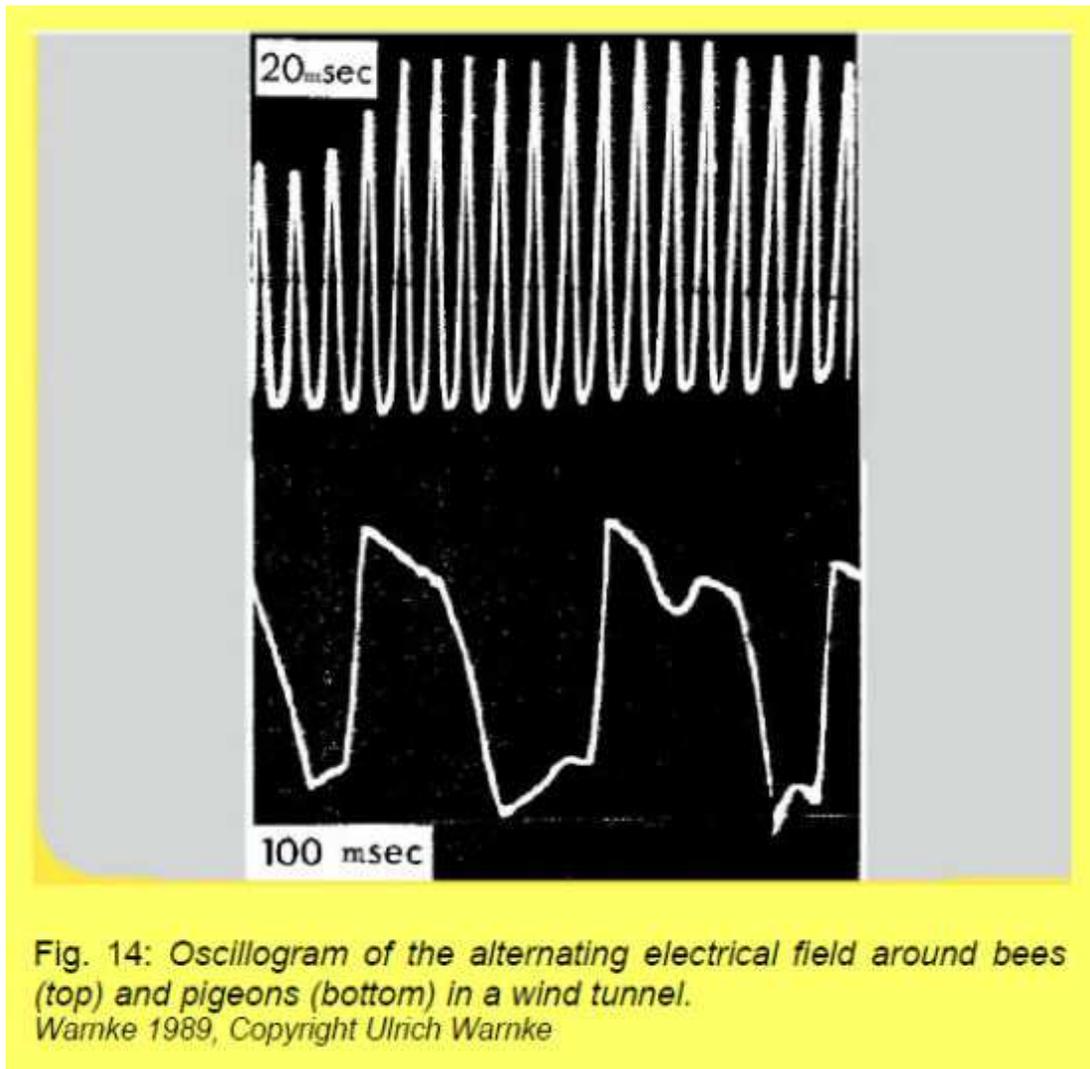


Fig. 14: *Oscillogram of the alternating electrical field around bees (top) and pigeons (bottom) in a wind tunnel.*
Warnke 1989, Copyright Ulrich Warnke



Fig. 15: *Wing section of bees enlarged with scanning electron microscope. Observe the special structures serving to focus the electrical field.*
Warnke 1989, Copyright Ulrich Warnke

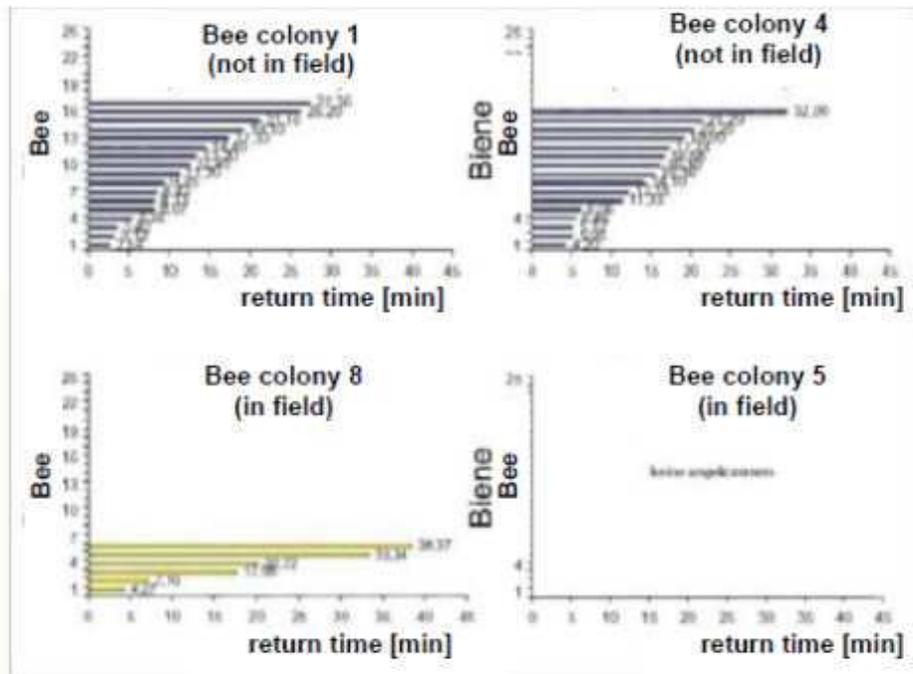


Fig. 17: Top left and right: return times of bees not subjected to a field; bottom: return times and non-return when subjected to a field. Of the bees from hives not exposed to a field, 40% returned in total, of those subjected to a field only 7% returned.

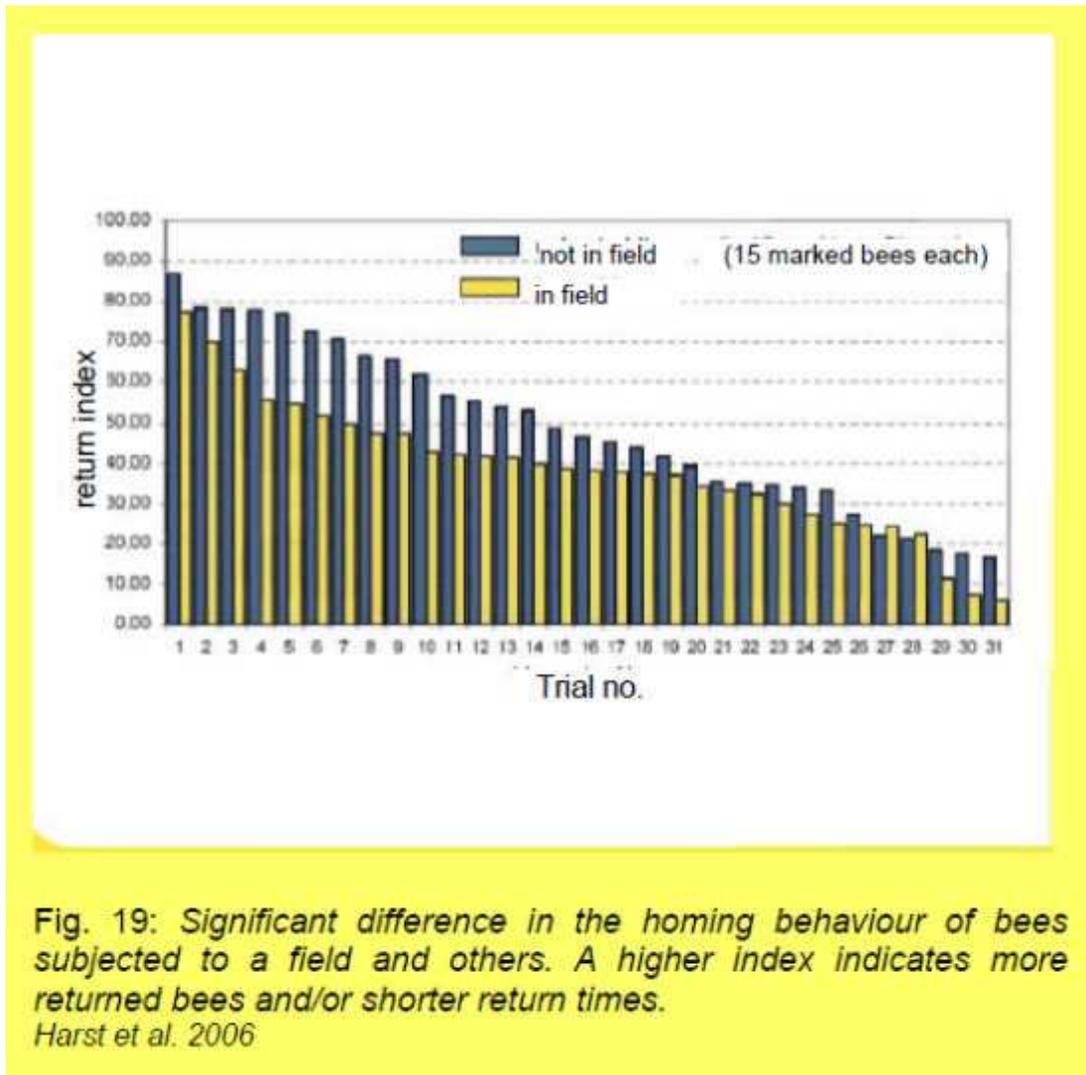


Fig. 19: Significant difference in the homing behaviour of bees subjected to a field and others. A higher index indicates more returned bees and/or shorter return times.
Harst et al. 2006

Warnke has included an entire section on HAARP in which he states:

"This is the strongest technical transmitter on earth. Its effectiveness is increased by linking the antenna array with another antenna array in Alaska, via HIPAS (High Power Auroral Stimulation). The transmitters communicate with submarines deep in the ocean and scan the horizon as a type of deep earth radar.

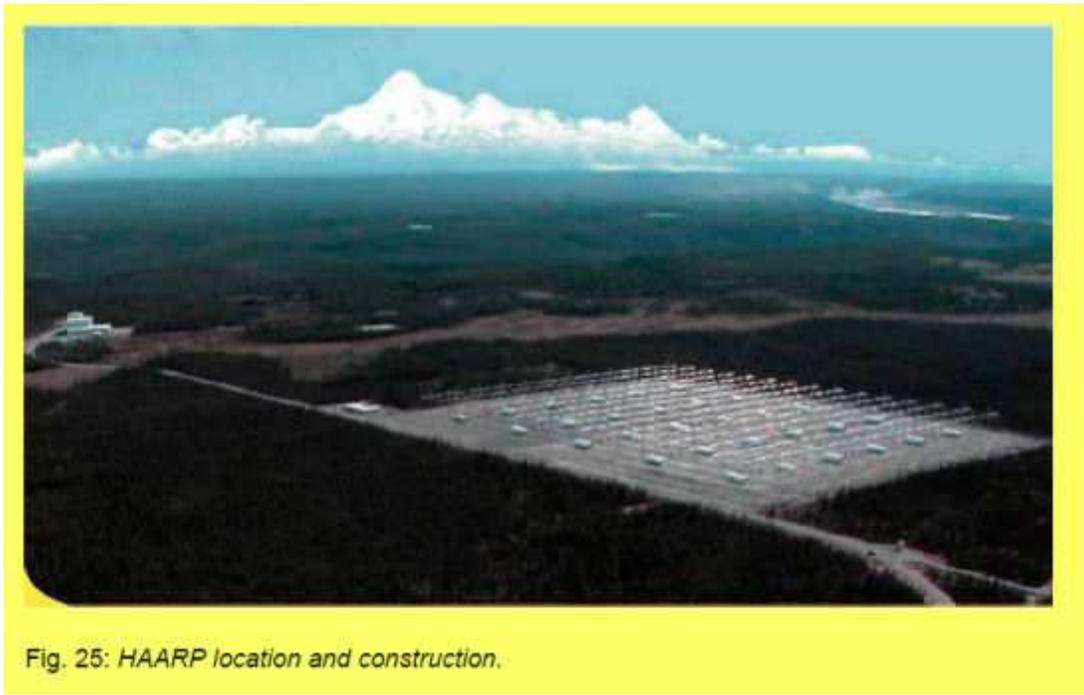


Fig. 25: HAARP location and construction.

"...the frequencies are ... absorbed by the ionosphere. They heat up certain layers, creating ion turbulences by day, that are modulated onto the earth magnetic field as unnatural magnetic fields. This masks the regular effects the sun has on the ionosphere. As such, the bees lose an orientation that served them for millions of years as a reliable indicator of the time of day -- encoded in the regular variations of the magnetic field changes as the sun rises and the ionosphere temperature rises.

"The effects of the HAARP transmitter activity should be further investigated especially in Canada, the USA and Europe. Since the disappearance of the bees was first documented in precisely these countries, a causal relationship can no longer be excluded. The following simultaneous events tend to confirm this: In 2006, the increase of the transmitting power from 960,000 Watt to four times that power (3,600,000 Watt), was approved for the first time. Exactly in this year, reports originated in all the "scanned" transmission regions of the disrupted homing ability of bees." [emphasis added -Ed.]

In summary Warnke states:

In any event, if all the scientifically proven facts are considered, it is clear why wireless communication technologies, with their overall density of superimposed electrical, magnetic and electromagnetic fields, should disrupt the orientation and navigation of many birds and insects -- above all, that of the bees.

Down the Rabbit Hole

The effect of electrosmog on natural biological entities has been known for decades. In 1971 the Naval Medical Research Institute published a bibliography³ with over 2000 citations addressing the subject. While the focus of the bibliography was on humans, the overall consideration was "biological effects" which would include all biological entities including humans, plants, animals and insects.

Brian Thiesen is a British Columbia expert on electrosmog, particularly that caused by Smart

Meters. He has talked to some of the top doctors, military weapons experts, electricians, engineers and has reviewed military and court documents. In his two-part paper on "What the Military Kept From the Public on Microwave Radiation"^{4,5} he presents documented evidence that the military has known about the biological effects of radar since 1950.

Do You Believe in Government Mind Control?



[Click to view video]

On a more sinister note, there is documented evidence that electromagnetic radiation can be used to control peoples thoughts and behavior.

On November 17, 2000, KOVR 13 News, Sacramento, California, CBS television, presented the special assignment news story "**Do you believe in government mind control?**"⁶ by reporter Ross Blackstone. It was presented in three parts.

Part 1 Mary Ann Stratton describes what it's like to be a victim of government stalking, harassment, surveillance and torture via electronic mind control.

Part 2: Cheryl Welch claims to be a victim of government mind control and has collected documents as proof. Her work is on her web site Mind Justice⁷, formerly "Citizens Against Human Rights Abuse."

Part 3: Dr. Nick Begich has researched government mind control programs and has authored "**Controlling the Human Mind,**" a well-researched and documented book on the subject⁸.

Jesse Ventura's Conspiracy show has an episode entitled "**Brain Invaders**"²⁶ which deals with government mind control by means of microwaves from GWEN towers.

Conspiracy Theory with Jesse Ventura Brain Invaders



Watch the video here: <http://www.youtube.com/watch?v=18PtOXrzDVE>

Summary

There is a Murphy's Law (one of dozens) that states "When searching for answers, more questions than answers is the inevitable result." Here are some questions raised by this report:

Why is there no "official" effort to determine the role of electrosmog on CCD and honeybee losses in general, when the research has been available for decades showing there is a definite effect on natural biological organisms -- including honeybees?

Did the people who conducted the French experiment using RFID chips realize the chips themselves may be a factor? If so, it was not mentioned.

Is there something more to the reporting that pesticides are not correlated to CCD, but pathogens may be? More specifically is this the start of a move to deflect guilt from industrial causes to something "natural"?

More pointedly, why is the USDA openly stating that "scientists have largely dismissed this [electrosmog] theory because exposure of bees to high levels of electromagnetic fields is unlikely?" Who are these scientists and where is their supporting data?

This topic of CCD / honeybee disappearance looks like it might be taking an interesting twist.

The URL for this report is: FoodBitsAndBites.com/honeybees/cause-of-honeybee-CCD-url.shtml

Sources and References

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