Barrie Trower's Paper on the bees and microwave radiation. -"Will the Communications Industry be the final straw for Our Planet's Ecosystems?" - Safe Land for Bees Presented at the Glastonbury Symposium - July 24, 2010: http://www.safelandforbees.org.uk/bees-and-microwave-radiation.html

Barrie Trower's Paper on the bees and microwave radiation.

"Will the Communications Industry be the final straw for Our Planet's Ecosystems?"

Presented at the Glastonbury Symposium, July 24th 2010

During a recent visit to Africa, a gentleman took me to a field full of plants and said "What do you hear Barrie?" I replied: "Nothing". He said: "Normally you and I would not be able to hear each other now, there would be so many bees buzzing, however, since that mobile phone transmitter went up, we haven't seen a single bee." I received other similar reports concerning bees, birds, even ants during my stay in Africa. It was explained to me that the ants are very important for their symbiotic relationship with plants. The plants produce a sweet substance to feed the ants and in return the ants prevent insects landing on and eating the plant's leaves. Hence, ants guarantee plant crop safety and harvest.

It appeared that the common denominator in all cases was the proximity of mobile phone transmitters transmitting low-level continuous microwaves with added modulations (pulses) causing cellular distress to species within range. Residents who complained were told that such installations were within 'International Safety Guidelines'; other residents were either totally ignored, mocked or ridiculed.

Yet proof of such effects from low-level microwave irradiation has been known to Government(s) and published since 1932. (1)By 1971 the US Naval Medical Research institute referenced 2300 research articles listing in excess of 120 illnesses from low-level microwaves. (2) This was reinforced by confirmation from the US Defence Intelligence Agency Documents from 1972-76. (3)

So what does all this have to do with bees, birds and ants? Well, quite a lot really.

Biologically, apart from some specialist organelles within the cytoplasm or the amount of genetic material etc, all animal and plant cells are very similar; in fact at the atomic and nuclear level, they are identical. Thus, if you are going to affect human cellular activity, you will inevitably affect other animal and plant cells from the same source. In this case according to Government reports, low-level microwave irradiation. The reader does not have to look far to discover that many experimental trials, evaluating harmful microwave levels, are carried out on animal cells / tissue first; or even live animals. These reference levels are then applied to human beings. Arguably the World's foremost scientific journal, 'Nature', published an article explaining how oscillating magnetic fields disrupt the magnetic orientation behaviour of migratory birds. (4) The frequencies referred to within this article are well within the modulation frequencies used by the mobile phone industry.

Dr Andrew Goldsworthy, retired Lecturer from Imperial College, London; extends this mechanism to speeches in his written 'comment': 'Establishing Why Bees Die Off' dated 13th January 2010.

Prof Karl Richter also extends this explanation and references the plight of bees subjected to such irradiation. He notes that these insects' immune systems seem to have collapsed with many bees suffering five to six infections simultaneously. Interestingly, suppression of the immune system is also described by the US Government as a symptom for humans exposed to low-level microwave irradiation. (5)

Similarly, Prof Ferdinand Ruzicka, who is a bee keeper himself, says: "The problem only appeared since several transmitters have been installed in the immediate proximity to my hives".

"Dragnose-Funk" continues: 'According to Ruzicka's observations, the bee colonies are so weakened by the mobile telecommunications radiation that they become more prone to various diseases.' (6)In his two-part, 13 page document, Guy Cramer includes the military and its Worldwide use of similar telecommunications transmitters as partly complicit to this cause for the demise of the bee population. In particular he singles out the US multi-transmitting towers in Alaska which can focus anywhere on the Planet by reflecting their transmissions off of the ionosphere. This is otherwise known as HAARP. (7)

Researchers like Colin Buchanan have actually outlined time-lines plotting the demise of bees and its relation to human induced electromagnetic radiation. (8)

Within my presentation to the beekeepers' association at Glastonbury in 2008, I referenced 14 articles explaining why the bees are particularly susceptible to microwave irradiation. I stressed that bees could be exposed to magnetic fields roughly 640 times more powerful than they normally encounter with the Earth's field. The consequences of this can be two-fold: i) the ferromagnetic compounds within their heads, thorax and abdomen can produce hysteresis loops affecting proprioception (spatial awareness); and ii) the very size of the bee's antennas, brain and body render it susceptible to resonance (unwanted vibrations). (9) Put simply, I would argue that the bee is disorientated with a failing immune system and like AIDS in humans will become victim of any infection(s) or infestation(s) which came along.

The reader will not be surprised to learn that there is a plethora of research data documenting ill-effects on virtually all animal species from insects to cattle, listing long-term low-level microwave irradiation as the cause. I will reference just a few of the many thousands that exist.

The Research Institute for Nature and Forest clearly state in their publication that '....long-term exposure to higher levels of radiation (GSM) negatively affects the abundance or behaviour of House Sparrows in the wild' (10)

Twenty pages of Laboratory Studies citing suppression of the immune system by e.m. radiation upon cows, cats, dogs, hamsters, whales, birds, bees, bats and butterflies were published in Feb 2005. (11)

Prof. Denis Henshaw references in excess of 8000 research articles describing low-level radiation and its effects on animal navigation, plants and health of the animal kingdom.

Prof. Henshaw states that in his estimation, less than 10% of the available scientific evidence is cited by official review bodies; also, in some areas, none of the literature has been cited. (12)

An article published in 'Microwave News' describes how low-level microwave radiation, when modulated, can cause nonthermal neurological effects in both humans and birds. Exactly what the US Government published thirty years earlier and seems to have been 'overlooked'. (13)

Internet researcher Sylvia Wright listed 27 peer reviewed studies showing effects, or possible effects, of low-level irradiation upon

seeds and plants. All of these papers had been published in scientific journals.(14)

Remembering that all planetary eco-environmental systems are interconnected, the monetary value of the World's ecosystems has

been estimated at 33 Trillion US Dollars annually. (15) With an understanding of the potential risk to nature; should the Global Telecommunications Industry cover our Planet with microwave transmitters, without further investigation or restriction? Could this potential financial loss be sustainable to many poorer countries?

The UK Government are advising populations to switch off all unnecessary lights, drive less, even restrict flying for holidays in order to reduce our carbon footprint. It has been estimated that the annual carbon footprint for the worldwide telecommunications industry is approximately 110.7 million tonnes of CO2 into our atmosphere. This is equivalent to the use of 29 million vehicles. Simultaneously all of our state schools are 'encouraged' to install wi-fi; virtually turning each school into a full-blown transmitter from the accumulative effect of microwaves. I find this a Governmental regulatory paradox. If for no other reason, than their total and absolute ambivalence on this matter! (16)

Are there solutions? Of course. In 2007 an international group of scientists studied 2000 peer reviews and published research papers. They recommended an acceptable level of radiation, based on the interaction between low-level microwaves and all known cellular processes. This became known as the bio-initiative level. (17)

The problem with this recommended level is that the telecommunications industry would suffer a reduction in profits. Consequently it is seldom adhered to.

There is a recent Legal Instrument. The European Parliament Guideline 2004/35/EG and advice from 21st April 2004, states that the 'causer pays the principle' for damage to animal, plants, natural habitats, water resources and soil. I must state here that I have no training in Law and should the reader wish to pursue this line of inquiry, expert international legal advice should be sought.

However, since September 1960, I have received several years of Governmental tuition on all aspects of microwave technology. At that time, microwave research was paramount Worldwide with many papers

published; including dangers of irradiation to living tissues from very low-level microwaves.

Knowing what we were all taught in the 60s, forces me to question the total ambivalence of today's Governmental Advisers. The microwaves haven't changed, only the colour and shape of the box emitting them.

Opinion

Could all of this potential damage to the Planet's eco-systems be a result of nothing more than Blind Corruption and Intentional Ignorance from our decision makers? Or is it planned? After all, if a country loses most of its pollinating insects (which tend to pollinate Vitamin C type plants), the health and financial status of such a country could be in jeopardy. The 'causer' could then offer a solution - at a price!

An interesting observation may be to look at the countries suffering the most; and those sweeping across such lands, installing a myriad of transmitters.

Barrie Trower Scientific Advisor to several organisations

3 Flowers Meadow Liverton Devon TQ12 6UP United Kingdom 01626 821014 Or ++1626 821014

REFERENCES:

1. Hecht, K et al. 2007. Overloading of Towns and Cities with Radio Transmitters (Cellular Transmitter): a hazard for the human health and a disturbance of eco-ethics. IRCHET. International Research Centre of Healthy Ecological Technology. Berlin-Germany P.1, para. 3

2.NMRI. 1971.Biography of Reported Biological Phenonomena ('Effect') and Clinical Manifestations Attributed to Microwave and Radio-Frequency Radiation.
Research Report. MF12.524.015-0004B
Report No. 2. NMRI.
National Naval Medical Centre. 4 Oct 1971.

3. US Defence Intelligence Agency Documents.

DST-18105-076-76 DST-18105-074-76 ST-CS-01-169 -72

4. Thorsten Ritz et al.Resonance Effects Indicate a Radical-pair mechanism for Avian Magnetic Compass. Nature. Vol. 429. 13 May 2004.
P. 177

5. Prof K Richter et al.Kompetenzinitiative. For the Protection of Man, Environment and Democracy.
 16 March 2008
 P. 3

6.Diagnose-Funk.The Big Bee Death 4 April 2007 P. 4

7.Guy Cramer. To Bee or Not To Bee, If That's the Question, What is the Answer? Colony Collapse Disorder linked to HAARP 2 June 2007

8.Colin Buchanan. The Disappearing Bees: CCD and Electromagnetic Radiation 22 February 2008

9. Barrie Trower.Presentation to the Beekeepers' Association Glastonbury 9 August 2008 'Is The Colony Collapse the price of e.m.f. progress?'

10. Joris Everaert et al. A Possible Effect of Electromagnetic Radiation from Mobile Phones Base Stations on the Number of Breeding House Sparrows (Passer Domesticus)
Electromagnetic Biology and Medicine
No. 26 pp. 63-72
2007

11.Animal study - EMF Radiation.http://members.aol.com/gotemf/emf/animals.htm

12.Prof D Henshaw. So Much Research, Yet so Little Notice Taken Physics Department, Bristol University, UK Undated

13.Microwave News.GSM Modulation is Key to Non Thermal, Neurological Effects. Vol. XXII No. 6 Nov / Dec. 2002 P.8

14.EMR and Plants: published papers in peer-reviewed scientific journals that show (possible) EMR effect. http://omega.twoday.net/stories/4601917

15.Robert Costanza et al. The Value of the World's Ecosystem Services and Natural Capital Nature. 387 pp 253-260 15 May 1997

16. G. Bennet.Powering Down the Networks 12 October 2009 http:<u>totaltele.com/view.aspx?ID=449730</u>

17.Bioinitiative. www.bioinitiative.org/report