

BIRDS ARE ESPECIALLY SENSITIVE TO THE EFFECTS OF EMF (AND ITS INFRASTRUCTURE) FOR A NUMBER OF REASONS:

THEY ORIENT MIGRATION BY GEOMAGNETIC FIELDS
THEY FLY, PERCH, ROOST AND NEST NEAR TOWERS
THEY ARE VULNERABLE TO ANY ECOSYSTEM CHANGES

EXCERPTS FROM INDIAN IMPACT STUDY:

"... [E]mbryos... of house sparrows were damaged after being exposed to mobile tower radiation for 5-30 minutes... changes included reproductive and coordination problems and aggressiveness... microwave radiation affected bird breeding, nesting, and roosting... House sparrows, white storks, rock doves, magpies, collared doves exhibited nest and site abandonment, plumage deterioration..., locomotion problems, and even death among some birds. No symptoms were observed prior to construction of the cell phone towers... [P]lumage deterioration and damaged feather[s] are the first signs of weakening, illnesses, or stress in birds. The disappearance of insects, leading to lack of food, could have an influence on bird's weakening, especially at the first stages in young bird's life. In chick embryos exposed to ELF pulsed EMR, a potent teratogenic effect was observed, leading to micropthalmia, abnormal trunkal torsion, and malformations of the neural tube... the effects of mobile phone mast[s] have] been... problems with reproduction, circulatory, and central nervous system, general health and well-being (microwave syndrome)... Deformities and deaths were noted in... domestic chicken embryos subjected to low-level, non-thermal radiation from the standard 915MHz cell phone frequency... Neural responses of Zebra Finches to 900MHz radiation... showed that 76% of the neurons responded by 3.5 times more firings... Eye, beak, and brain tissues of birds are loaded with magnetite, sensitive to magnetic fields, [EMF]interferes with navigation..."

This map offers links to important reports, presentations and studies.

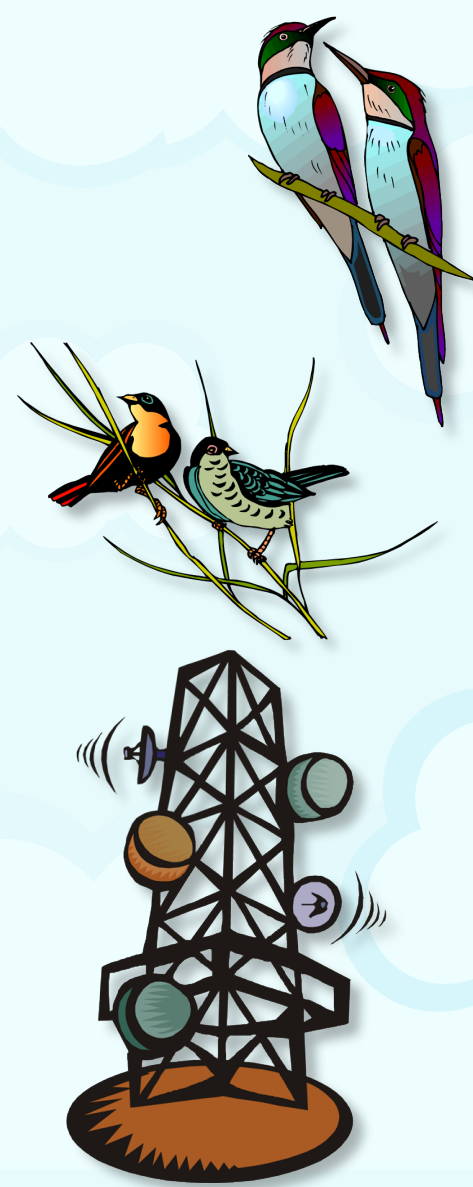
PIGEONS FORCED TO TWEET

DIRECT EFFECTS OF EMF AND TOWERS

- Population declines
- Nests and roosts near towers abandoned
- Nests near towers have no chicks
- Aggressive behavior
- Escape and avoidance reactions
- Developmental abnormalities
- Embryo malformations
- Unstable egg production
- Reduced ability to recover from stress
- Injuries, crippling, death from tower strikes
- Increased calcium efflux, chick forebrain
- Plumage deterioration
- Locomotion problems
- Disorientation near towers
- V-formations disrupted near power stations
- Communication between birds disrupted

INDIRECT EFFECTS

- Effect on plants, loss of habitat, food
- Effect on insects, loss of food



CUMULATIVE IMPACTS OF TOWERS ON MIGRATORY BIRDS

IMPACTS OF RF ON BIOSYSTEM AND ECOSYSTEM

IMPACT OF COMMUNICATION TOWERS ON WILDLIFE, BIRDS, BEES

IMPACT OF TOWERS, AVIANS



"Birds are powerful indicator[s] of an ecosystem because of their thin skull[s], feathers as dielectric receptor[s], high mobility... use of areas having high electromagnetic field[s]... and absence of psychosomatic effects. Penetration of microwaves is greater for birds." *Battacharya and Roy*

- [Sparrows dying](#)
- [Towers killing birds](#)
- [Birds, Bees, and Us](#)
- [Endangering wildlife](#)
- ★ [Birds, bees, Canada](#)
- [EMR in our environment](#)

- [Cell tower radiation kills birds](#)
- [What price your smartphone?](#)
- [Migrating birds rely on sunsets](#)
- ★ [NIR, birds and other wildlife](#)
- [Cell towers killing bees, birds, 1](#)
- [Cell towers killing bees, birds, 2](#)
- ★ [Canaries, other species, EMF](#)
- [Towers disorient homer pigeons](#)
- ★ [Commentary, sparrows, EMF](#)
- [How cell phones are killing birds](#)
- [Smart Meters, birds, Rolling Hills](#)
- ★ [EHT: Memorandum of concern](#)
- [Mobile phones and vanishing birds](#)
- ★ [Magnetoeception, bird navigation](#)
- [Sparrows disappearing from Assam](#)

- [Birds suffer effects from EMF sources](#)
- ★ [Bird numbers falling in Greece, 4G?](#)
- [Melatonin reduced in humans, animals](#)
- [Radio waves zap biomagnetic compass](#)
- [EM noise disrupts migration of songbirds](#)
- [Panel to study EMF effect on birds, bees](#)
- ★ [Mobile phones and vanishing sparrows](#)
- [Mobile tower radiation clips sparrow wings](#)
- [Mobile towers driving migratory birds crazy](#)
- ★ [Where have bird friends gone, TETRA, towers](#)

Articles



IS ELECTROSMOG HURTING OUR WILDLIFE? 149 REFERENCES

BIRDS, BEES AND THE DESTRUCTION OF NATURE

★ **H.E.S.E. PROJECT, BIRDS**

EMR AND BIRDS

★ **EMF, BIRDS, OTHER WILDLIFE**



RESONANCE BEES, BIRDS, EMF

PROTECT THE BIRDS

- Reduce all artificial EMF
- Reduce field strength where possible
- Remove towers from migratory routes
- Group remaining antennas together
- Remove or down-shield tower lighting
- Remove guy wires structure
- Manage diversity to provide habitat
- Create, increase protection zones

Studies

- [Wildlife, phone mast effects](#)
- [MW absorption by magnetite](#)
- [Natural EMF and flocking behavior](#)
- ★ [RF disables magnetic compass](#)
- [Warbler orientation disrupted by MF](#)
- [Chicken, embryo membrane disruption](#)
- ★ [RF, chick embryo, liver development](#)
- [Collection of published studies on birds](#)
- ★ [Zebra finches disoriented in RF-field](#)
- [Avian mortality at communication towers](#)
- [RF emerging threat to wildlife orientation](#)
- [Reproductive, developmental effects of RF](#)
- [\(1967\) Non-thermal effects of MW on birds](#)
- [Problem in studying due to non-linearity, more](#)
- ★ [Towers, white stories, decreased nest productivity](#)
- [Anthropogenic EM noise disrupts migratory compass](#)
- [Tragedy of Commons, High Tech Risk of Wireless World](#)
- [Artificial light at night affects dawn song, pairing, lay date](#)
- [High frequency field, disorients, affects magnetoreception](#)
- [Bird feathers as dielectric receptors of microwave radiation](#)
- [MW affects on neural structures, resonance, induced fields](#)
- [EMF, free radicals, membrane disruption, chicken embryo livers](#)
- [Weak broadband more disruptive than strong narrow band, songbird](#)

EMF AND BIRDS

PETITION TO HELP MIGRATORY BIRDS.

U.S. DEPT. OF INTERIOR EXPRESSES CONCERN RE: MIGRATORY BIRDS TO N.T.I.A.

Home: [Oscillatorium](#)
Newest version [this map](#)
Date of this update: 08-24-17

How Do Birds Navigate?

[Tower Collisions](#)

[Navy's EM Weapons will injure Living Beings](#)

[Microwaves and Wildlife](#)

- [Electronic Silent Spring Site](#)
- [Electronic Silent Spring Book](#)
- [Electronic Silent Spring YouTube](#)
- [Electronic Silent Spring Collisions](#)

[Massive destruction of nature by EMF](#)

[A. Firstenberg: Silent Wireless Spring](#)

[What's happening in nature: Levitt Audio](#)

[Towers, turbines, powerlines and buildings](#)

★ [YouTube: Effect of EMF on birds, wildlife](#)

[Testimony against stealth tower, bird corridor](#)

★ [Dept. Interior, 241 species of concern, towers](#)

