



February 22, 2017

Letter to editors of Sound and Vibration with respect to recent publication: “Health Effects from Wind Turbine Low Frequency Noise & Infrasound: do wind turbines make people sick? That is the issue.”

Dear Editor/Publisher, Jack Mowry, and Associate Editor, George Fox Lang,

SV@mindspring.com
gflang@verizon.net

C.c. Rick James, Steven Cooper, Dr. Jerry Punch, Dr. Sarah Laurie
C.c. Interested parties

We read with some surprise, your referenced publication, “Health Effects....do wind turbines make people sick?” The very first paragraph of this publication shows bias and to our view, lack of the understanding of impacts that is now afforded even to ordinary people without degrees in acoustics or engineering. The authors, Hessler, Leventhall, Schomer and Walker, in our view, failed to reflect more adequately the current understanding and referenced work of persons such as Rick James, Jerry Punch, and Steven Cooper (and more, of course), as well as victim impact statements, which are readily available. While Mr. Cooper’s Cape Bridgewater study is lightly referenced in your published piece, it is clear to us that the work he has done is conclusive and groundbreaking, especially for those inside that study, finally vindicated and offered hope. It would also behoove the authors to reference the most up to date and finely tuned machines available: victims’ bodies and minds and their completely honest reporting of symptoms. People simply do not up and leave homes, sleep in pup tents, or at the Walmart parking lot, for no reason. They do not manufacture symptoms, and spend countless hours sleepless and stressed, often losing employment, because they are “imagining” or “hostile”.

The North American Platform Against Wind Power is a collection of persons and groups, millions of persons now; we liaise with European and other counterparts daily. This current flow of information includes professionals, many politicians, and persons of all backgrounds, impacted and interested persons.

In this letter, we respectfully express our objections and concerns for the piece recently published in your 50th Anniversary edition of Sound and Vibration. Short title: “Do wind turbines make people sick?”

The first egregiously patronizing comment to victims is this:

It has been the first author's privilege and pleasure to associate and collaborate with three prominent co-author scientists in the wind turbine acoustical field. All four authors do not doubt for a moment the sincerity and suffering of some residents close to wind farms and other low-frequency sources, and this is the reason all four would like to conduct, contribute or participate in some studies that would shed some light on this issue. It must also be said that it is human nature to exaggerate grievances and that some qualitative measure must be made available to compensate affected residences.

This insulting insinuation, that it is human nature to exaggerate grievances, and that the basis for wind turbine health complaints is indeed exaggerated, will inflame some who have lost homes, livestock and health. There is little exaggeration in the stories NA-PAW hears, as recently as yesterday, birds being born without eyes in a barn in Colorado, deaths and [enlarged organs or post mortem hemorrhaging in other livestock.](#)

It shortly appears that the authors are soliciting funding for more studies:

It would seem one promising direction of a study could be extensive interviews of such folks exposed to high levels of wind turbine noise that could reveal common symptoms and/or the number of folks seriously affected.

The authors go on to explain:

However, a nocebo effect may occur, by which expectation of an outcome may lead to realization of that outcome (Chapman, Joshi at al., 2014).

There are a large number of coordinated objector groups working internationally. A web page (<https://quixoteslaststand.com/>) gives links to more than 2000 groups that share information on wind turbines, while some make unsubstantiated, anecdotal claims about their effects. However, there is no doubt that when stress is persistent it may result in somatic effects in a small number of people who have a low-coping capacity, although the ability to cope can be enhanced (Leventhal, Robertson et al., 2012).

In our estimate, there are well over 5000 international groups questioning the various failures of industrial wind. There are 1500 in France alone. The impact claims are not “unsubstantiated,” and the sheer volume of anecdotes has now become “data.” We respectfully suggest that the level of “persistent stress” happening worldwide in absolute tandem with legitimate reporting of symptoms, is of the level that some, including we, are calling it a pandemic, and have referred complaints to the [World Health Organization](#). Again, the insinuation that victims have “low-coping capacity and that this can be “enhanced,” is outrageous and insulting to victims.

In a compacted manner of explaining our objection to this research, here is a shortened list of objections:

1. References to low coping capacity and nocebo, depression and exaggerated responses from victims.
2. Using the Clean Wisconsin study, and the Health Canada so called “study” as reference points. [The HC study is widely repudiated](#), and indeed only included to our knowledge is a single impacted person, and the turbines were turned off the day she reported to an investigator. Efforts to include truly impacted persons did not bear fruit. The HC study begins with a policy statement that Canada wishes to expand wind power to 20% by 2020. Hardly an independent statement. Many, including [Dr. Robert McMurtry](#), Order of Canada, have explained the lack of integrity with this study, sadly now referenced by international agents of the wind industry.
3. This below begs a more fulsome reply from us:

Infrasound has a special place in discussions of the health effects of wind turbines, with many claims centered on direct pathological interactions, initially fostered by media scare stories originating in the 1960s and still continuing (Leventhal, 2013a).

In his 1974 popular science book Supernature, Lyall Watson described infrasound as causing deaths ("fell down dead on the spot"), while focused infrasound "can knock a building down as effectively as a major earthquake." This is unfounded, but an aura of mystery and danger persists around infrasound deep in the minds of many people, where it waits for a trigger to bring it to the surface. A recent trigger, heavily manipulated by objectors and media, has been wind turbines (Deignan, Harvey et al., 2013).

A concept from psychology is the "truth effect," which explains how we can develop belief in false statements through their repetition by others (Henkel and Mattson, 2011).

We believe statements that are repeated, especially by different sources.

The path to our belief is made easier by each previous repetition.

Advertising and political propaganda are clear examples of the operation of the truth effect, which is also known as "illusory truth."

We all also have our preferred beliefs. When there is a choice, we tend to believe what we wish to believe....

It is again, difficult to understand the injection of, to our view, pop psychology “truth effect,” exploration into a scientific paper. Using fear of infrasound in extreme examples, does nothing to elucidate the impacts from highly variable pressure pulsing, ILFN, dBA, shadow flicker and vibration. Nothing. The use of these arguments detract from the authors’ wished-for effect of believability.

4. The assertion that over time, the “speculative claims”, lacking evidence, will become “discredited” over the next 5-10 years. Repeated references to annoyance and stress, and “individual’s reactions.” Again the statement is pronounced as if from authority, quite false, that there is “no established evidence.”
4. The assertion that in “hostile” persons, the stress may become exacerbated.
5. Sleep disorders are worse, the piece suggests, in “hostile” persons.
6. The authors invite their participation in further study, some of which may include intensive interview systems in complete “cooperation and possible sponsorship” from the

AWEA in America, and others. Such a survey must have the complete cooperation and possible “sponsorship from the industries’ national representative, AWEA (American Wind Energy Association) in America and others throughout the world. The authors would like to suggest questions to any study team.” It appears to us that any such sponsorship would or might be considered by victims and communities as collusion again by industry and persons who as in this article suggest condescension and complete lack of understanding about the complexity of the human body’s ability to measure impacts, and report with integrity. To us, this idea is incredulous. There has been enough of this kind of reporting and “study,” with to our view, insincere results, and lingering impacts with no relief at all.

(About sleep disruption or deprivation, please consider that a simple sleep test inside homes, in real time, may prove extremely useful. It is widely understood that sleep deprivation is a path to disease. It is well known that the single most reported impact of industrial wind, is sleep deprivation.)

Please see below an excerpt of our writing on Master Resource, concerning the [Cooper Cape Bridgewater study.](#)

Cooper Study

Among the hundreds if not thousands of victims worldwide, six people in three residences at the project of Cape Bridgewater, would beg to differ. So would [Steven Cooper, author of a ground breaking study](#) that strongly correlates low-frequency turbine noise and their “sensations” and ill effects (we would suggest, among OTHER known ill effects).

This is the first time in the world where a turbine operator (Pacific Hydro) has cooperated, and allowed a turn off of the turbines, in order to provide a blind study for these victims and for the Acoustician. Residents living between 650 meters and 1.6 km of the wind turbines were asked to document their effects, headaches, pressure, ringing ears, heart racing or sensations of “heaviness.”

Noise, vibration, and “sensation,” were categories rated, on a scale of one to five. Mr. Cooper indicated in phone conversations and in media releases, that this was the first time that residents were asked to use the category of “sensation,” as opposed to experiences of “audible noise.”

When the results were tabulated with overwhelming and clear evidence of the cause of their sensations, victims quickly expressed relief: more study of the residents’ experiences at the Cape Bridgewater survey site, can be viewed [here.](#)

“It is an absolute relief, like an epiphany to have him (Mr Cooper) say I was not crazy (that) when I am doing the dishes I feel nausea and have to get out of the house.”

“Another participant, Jo Kermond, said the findings had been ‘both disturbing and confirmation of the level of severity we were and are enduring while being ridiculed by our own community and society’.”

Victim Letter to Health Minister Hoskins

On hearing about Cooper’s study, Ontario (Canada) resident, Virginia Stewart Love, wrote a letter to Eric Hoskins, Liberal Minister of Health, Ontario, Canada.

Hello Dr. Hoskins,

I have written to you in the past and also provided you in person with information regarding the physical health effects of IWT on myself, my family and my neighbours. I imagine that your position demands a great deal of your time which would explain why I have not had a response from you regarding my concerns.

Below is an article that describes a study conducted at the Cape Bridgewater Wind Farm in southwest Victoria, Australia and funded by wind farm operator Pacific Hydro in which a methodology has been developed to undertake assessments using narrow band infrasound.

What is of interest is that the research included sensation rather than audible noise as an indicator of residents’ perception of nearby wind turbines. These sensations were experienced at narrow band sound pressure levels. The findings are consistent with research into health impacts from early model wind turbines conducted in the US more than 20 years ago. (I.e. Acoustic Noise Associated with the MOD 1 Wind Turbine: Its Source, Impact, and Control, N. D. Kelley, February 1985). Many people filling complaints with the MOE over the years have described these sensations. I have maintained from the beginning that I feel the turbines and only hear them when I am outside or in the summer when the windows are open. (Our emphasis. Letter reprinted with permission of the author.)

“It is common knowledge that the industry has lobbied to exclude low frequency noise from the guidelines that regulate noise for IWTs, the assumption being that IWT could not be compliant under such regulations. Avoiding the truth never makes a problem disappear.”

This is but one more piece of research that can be added to the volumes of studies already conducted that show a link between IWT noise and health

impacts for those residing in close proximity to developments. Studies using all the pertinent data need to be conducted in order to find the solution. Building more turbines before we have those answers will only add to the growing numbers of people impacted.

I hope that you will find this study worthy of investigating.

Sincerely,

Virginia Stewart Love

We also direct your attention to the superb collation and analysis of studies of impacts of turbines over 40 years, by Rick James and Dr. Jerry Punch. (*Wind Turbine Noise and Human Health: A Four-Decade History of Evidence that Wind Turbines Pose Risks, October, 2016*)

<http://hearinghealthmatters.org/journalresearchposters/files/2016/09/16-10-21-Wind-Turbine-Noise-Post-Publication-Manuscript-HHTM-Punch-James.pdf>

The authors of your piece invite questions for further study. We offer these questions from Mr. Cooper and one from ourselves: Questions to ask developers and policy makers. We find these to be germinal. These are the questions we would ask to protect communities.

Question One: Please provide the studies upon which the wind turbine project guidelines have been developed.

Question Two: Please identify the noise source(s) that have been used in the studies related to question one.

Question Three: Please provide the dose-response data related to wind turbines and installations upon which the guidelines/acoustic criteria are based.

Question Four: The most common complaint from residents relates to sleep disturbance. Please provide the studies on wind turbine installation noise that identify the noise level (in any relevant acoustic index) that gives rise to sleep disturbance.

Question Five: Please provide the studies of wind turbine noise that identify the noise level (in any relevant acoustic index) that will not give rise to sleep disturbance.

Question Six: Please provide the studies of wind installation noise that identify the noise level that will protect the acoustic amenity of residents in proximity to wind factories/farms.

Question Seven: In light of the above, please identify who would be liable for the consequences of adverse impacts arising from the operation of wind turbines/installations, in any Class Action for a wind turbine installation satisfying permit conditions imposed by.....

Question Eight from NA-PAW: Where are the feasibility studies, and where is the cost benefit/performance study?

We will leave these observations on the publication in Sound and Vibration with a few quotes from very recent notes, today's, as sent to us, with one exception outside of today's date, received by NA-PAW. These are quoted with permission from the authors. If there has been a more perfect widespread architecture of human misery, health impacts in the last 30 years, loss of homes, loss of property values, loss of community and friendships, loss of livestock, economic hardship, we do not know what it might be.

Resident of Ontario, Canada:

Even if the MOECC obtains a few out of compliance measurements, it appears the MOECC can and will NOT do anything about it. An official compliance test can take more than a year....and the MOECC does not have the knowledge, skills, ability OR equipment and Aercoustics is telling the MOECC "PROVE IT".... "PROVE WE ARE OUT OF COMPLIANCE".

The MOECC repeatedly assured people in this project that they were REQUIRING an acoustical and tonal assessment at "complainant properties". Our home was measured at 41.6 dBA using part C2 of the MOECC protocol in August 2015. This measurement did not even take into account a 5 dBA penalty for the obvious TONAL noise from the turbines!

In my opinion, the turbines surrounding my home should be turned off until this situation is resolved. K2 Wind should be required to fund an acoustical and tonal assessment at my property conducted by a truly independent consultant and the "receptor" should have input in selecting the acoustical testing firm.

It is unacceptable that a company can blatantly lie to the Ontario Government/ MOECC (Ministry of the Environment and Climate Change) and string along people who are being harmed - for over a year!

Resident Colorado, USA

We (Jeff and I) just finished talking to the carrier who took over Jeff's route. She is in her forties and developed bad headaches and nausea when she took over this route. She considers this abnormal for her. She also is concerned about vertigo, a condition she had experienced with some medication a few years ago and a known side effect that went away when she stopped the medication. She is feeling the same sensations, although not as debilitating, when she runs the route through the turbines. She is concerned because the only relief she gets is on the east side of the route, where the Rush Creek project is proposed to be erected.

She was also able to tell us that she saw the turbine fire a few weeks ago, the one that happened just north of Harrisville on the west side of Blasingame. It was a nacelle fire and the fire department confirmed it was from oil leaking out of the turbine. This is my first confirmed turbine fire, less than a year and a half into this fiasco. She said 'all of Calhan knows it'.

Another problem this region is exploding with are cases of blindness or partial blindness, animals and people. Even the new mail carrier for Jeff's route experienced a sudden decline in her eyesight just after she moved out here about four months ago. Jeff and she talked about another woman on the route that has this new problem (I think it became noticeable Fall of 2016). For Jeff the eyesight problem hasn't gone away yet, but he has only been out since January 3rd and he comes back every other weekend for just short of three days. However, Jeff's base temperature seems to be going up. His temperature, which ranged from 95.1-95.9 pretty consistently since last spring before leaving January 3rd, 2017 (no, in these turbines we, Jeff & I, do not have a steady base temperature), is currently pretty steady at 97.1 - 97.2. We asked the mail carrier to start monitoring her temperature.

*Well, this is all for now.
Sandy*

Resident of Ontario, Canada, Lorrie Gillis, named with her permission: Commenting on the Community Liaison process: a process additionally causing grief.

These meetings are painful.

Capstone has done its engineering computer modeling that shows they are in compliance, according to Capstone turbine reps and if there is any information out there that shows something different, they would LOVE to see it. One of the audience members dropped the file that shows regular noncompliance of turbine noise right then and there with the meeting facilitator. Well, MOE (Ministry of the Environment) will have to give the okay that it's an approved method of measurement. All that aside, if you're having trouble, by all means, go to MOE and they will do their job, won't they? And if it's the middle of the night and it's bad (Who knows, could be a broken blade. It's hard to tell in the dark.) Capstone said that if you call Spills Hotline at MOE, they will take care of it right away. Well, surprise Capstone, they don't.

At any rate, the turbine company has 18 months to assess it all. All of you getting hit by the noise, both audible and low frequency, shadow flicker, flashing lights; the whole works; are currently Capstone's guinea pigs for 18 months. They are doing everything they are mandated to do already, so go tell it to the MOE. Complain to Capstone and they will send it to the MOE (Ministry of the Environment).

On to the issue of Community Funds up for grabs which is a pretty hot topic for any who have seen their quality of life hit the skids after turbines move in next door. One committee member seemed to be there expressly to get their hands on some of that. She lives far away from the turbines and wants some of this money for a Flesherton Community committee. Another committee member tried to express the betrayal of those being harmed by the people who accept that money. Some think Grey Highlands should just take it since it will cut into the wind company's profits. I'm not one of them. The committee member who was asking others to think about those who are immediately next to the turbines in question, came up with a pretty brilliant idea in my opinion. He said, 'Okay, once this company has taken care of getting rid of all the problems now hitting some residents, go ahead, take all the money you want. But no money until that happens.' Well, in a conversation afterwards, the person looking to get some money told me there are always two sides to a story after all. I told her and will tell anyone else who

says that, that when a person is sick in a turbine-toxic home, there isn't another side to that story. They are sick. Period. While a recipient is smiling and thanking the wind company for money for the new slide in the playground, other people cannot stay in their own homes anymore. Does anyone else not see a bit of a moral dilemma here?

Story from the UK, impacted resident, senior, who has had to give up his dog which is exhibiting serious signs of distress from turbines, and he himself has to vacate his beloved home of 35 years because of health impacts. <http://www.dailycrecord.co.uk/news/local-news/carrick-pensioner-forced-give-up-9859771>

Resident of Ontario, July 2016

It is July 17, 2016. The K2 wind turbines owned by Samsung, Pattern, and Capital Power located in Ashfield, Colborne, Wawanosh Township in Huron County Ontario are harming us. There is crashing, whomping, and thunder like noise. We can feel the pressure/ energy waves. In addition, there is a solid tonal "wooooooo" noise.

We experienced health issues beginning at approx. 9 pm. We called the spills hotline and made a health complaint at approx. 11 PM. I am experiencing ear pain and popping, neck, face and jaw pain. My husband has head pressure and pain and beginning to get a headache. We had several people at our home this evening who said they needed to leave because of health impacts.....ear pressure and pain, headache. One woman was disoriented due to the thunder like noise and fell coming up the front steps when she first arrived!

The dog is hiding in the basement.

Investigate this as a HEALTH and noise complaint.

Resident of Ontario: reporting on single Enercon turbine at Kincardine:

Our group STOP has a single Enercon turbine in our neighbourhood which has been a nuisance for the past 4 years since it began operating resulting in people leaving homes and filing over 300 complaints of noise and health problems.

From an impacted resident associated:

We have compiled a list of dates and times since January 24th, 2017, where we have been extremely troubled by the noise produced by the UNIFOR wind turbine operation. We have been documenting these because we are not always able to file the complaint at the exact time that it happens. Please find below a list of these complaints.

Tuesday, January 24 @ 6:15 PM. Winds NW @ 30 km/hr

Saturday, January 28 @ 6:30 PM. Winds NW @ 29 to 45 km/hr

*Sunday, January 29 @ 8 PM. Winds N @ 10 km/hr. **The noise is extreme tonight.***

Friday, February 3 all day and night. Winds W @ 20 to 40 km/hr

Wednesday, February 8 all day again.

Saturday, February 11 first noticed @ 5 AM. Very disturbing.

Wednesday., February 15 all day and still at 11:15 PM. Winds N @ 24 to 37 km/hr

Thursday, February 16 all day again. Winds NW @ 12 to 18 km/hr

Sunday, February 19 all day so far. As soon as we open the door to go outside all we hear is the constant cyclic roar of the turbine. Winds W @ 15 to 32 km/hr.

On many of these occasions the turbine noise can be heard above the deafening roar of the lake and high winds in a winter storm. That's pretty substantial.

Please know that we gave the CAW/UNIFOR turbine the "benefit of a doubt" when it first began operating because we were willing to give such green energy initiatives a chance, but as time went on, we began to be adversely affected by this noise pollution, (basic sound annoyance disturbing the enjoyment of our property and also health and hearing issues). The suffering continues with no end in sight. Something needs to be done as soon as possible.

Sadly, our computers' hard drives are chock full with stories of daily and accruing stress. No, it is not as the developers in Colorado indicated in a public meeting, the turbines are as quiet as crickets, or a bowl of Rice Krispies with milk. The sounds and noises are completely unique to industrial wind. To us from the reporting and personal experiences, we cannot find a suitable comparison to this noise and pressure. What is clear to us is that appropriate measurements and protective guidelines are not in place world wide.

Do wind turbines make people sick? This is a rhetorical question. The question is now how to remediate and remove offending projects, how to compensate victims, and how to change policy going forward. To add height to the indignity, it is sad to know that the proliferation of industrial wind has been a debacle: no net gain economically or to the environment. Just the opposite.

Thank you sincerely for your endeavors to correct the apparent misinformation in the Schomer et al piece. We look forward to a correction, apology to victims, and retraction, and/or publication of other viewpoints. Attacking victims, marginalizing the impacts, saying they don't exist, or exist because of hostility, is not a viable scientific method.

Respectfully,

Sherri Lange
CEO North American Platform Against Wind Power
Founding Director Toronto Wind Action
Executive Director Canada, Great Lakes Wind Truth
VP Canada Save the Eagles International
Founding Member, Ontario Wind Action
www.na-paw.org
www.greatlakeswindtruth.org
www.wind-watch.org
kodaisl@rogers.com