

*Thy long blue solemn hours serenely flowing,
Whence earth, we feel, gets steady help and good.—
Robert Browning, "Pippa Passes"*

*Noise—The Ultimate Insult**

By Alfred Etter

I speak for a little black girl who recently visited the Morton Arboretum where I am the Naturalist. During our walk together, she discovered a small piece of a tree. Unable to recognize wood that had never been sawed or nailed she asked what it was. When she learned that it was a piece of genuine tree, just the way God made it, she was so delighted that she embraced it like a doll and carried it home to the ghetto with her on the bus. That is how ignorant of nature our people, especially our children, have become. For many of them, the unnatural has become the usual—so it has been with noise.

I think I speak not only for this little girl, but for people of every age who, because of rising levels of noise everywhere, are searching for something they feel they have lost. Without knowing it, they need to walk and sit together in a quiet place and look at the earth, listen to how the birds sing, and perhaps to puzzle about how much plants, growing and developing, can accomplish without ever making a sound.

When I requested permission to testify at this hearing, I was asked whether I wanted to testify as an expert. How does one qualify as an expert in these matters? Must we have a Ph.D. to speak out against the inhumanity of man's noise? Isn't just being alive enough? Aren't ears sophisticated enough to tell the difference between what is strident and what is soothing? Aren't irritation and anger as good a measure as decibels?

If it helps impress someone, then yes—I have a Ph.D. I have spent eight years in college and the rest of my life in studying the earth, and the life on it. I have made it my responsibility to understand how the world is put together—and not a little of this understanding has come from listening to the sounds of nature—the silent sounds of stars, the timeless flowing of rivers, the enthusiasm of wrens, the gnawing of squirrels as they husk walnuts in the fall.

In the past fifteen years of my life, I have travelled among the largest cities in the nation, and so I have become somewhat expert not only on sounds but on noise. I have heard most of the sounds of nature obliterated from the lives of people—worse than that, the sound of the people has been obliterated too.

Now that I am living at the Morton Arboretum in Lisle, I am receiving an involuntary post-doctorate in suburban noise. Though people have a vision of the Arboretum as a nice quiet

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green island somehow immune to progress, that vision is false. Hemmed in by ever-mounting traffic of every sort, it is already a victim of the noise that people and industry bring with them when they are fleeing the inhumane conditions they themselves have created in the deeper city.

A short time ago we had a ceremony on the grounds of the Arboretum at which Senator Adlai Stevenson spoke. Many of those in the audience were disappointed that they were unable to hear him because of the traffic on Highway 53 where trucks, attempting to satisfy the insatiable demand of people for a new environment, pace back and forth like caged tigers.

I live on the Arboretum grounds, and my bedroom window faces south overlooking the East-West Tollway about a thousand feet away. The Burlington Railroad is nearly a mile further south. Jets often fly by only a few thousand feet overhead. I have no choice in summer but to leave the window open, and all night I toss and turn and have my own violent thoughts about how I can outwit the vibrations that shake not only the sky but the earth even from those distances.

I wonder how many others toss and turn, and grow angry along with me. Yet I am far more fortunate than most. What tortures of noise are inflicted upon those who are trapped in the breathless city—forced to open their windows to the excretions of industry, the hot exhausts of vehicles, and the exhalations of countless office and apartment air conditioners that heat rather than cool the environment? Is it any wonder these people revolt, burn, vandalize, seek refuge on Government property by the lake, as Mike Chosa and his Indian followers tried to do? The Indians still have enough instinct left to recognize the kind of environment a human being needs—what kills and what lifts the spirit.

At the Arboretum on field trips I often try to tell children's groups how we should take care of the earth. What hypocrisy! My words and their questions are drowned out by banging vehicles and rasping tires. The sounds of frogs or birds or squirrels might as well not even be. Not long ago there was national concern about a silent spring. We have solved that threat with a greater one. Who knows whether the spring is silent or not amid the pandemonium of modern vehicles?

Not long ago I spent a morning at the Ogden Avenue School in La Grange with a group of young people, trying to show them what there was of nature left on their own school yard. Amid the acceleration and deceleration of trucks and jet noise overhead, I could hardly make myself heard when I tried to communicate some of my excitement at finding a honey bee nest in an old maple tree.

For the sake of economy, several school buildings in the Chicago area are now being used twelve months of the year. Have you ever tried to teach, or learn, in a hot school with all the windows open and the noise of the traffic and road repairs boiling up from the streets? What is gained by wasting pupils' and teachers' time trying to fight the domination of today's traffic? How many of the other so-called fruits of civilization—the art museums, the peaceful parks, the opportunities for visits and strolls in the neighborhood—have succumbed to the omnipresence of noise?

On a farm where I lived and did research, it was an everyday observation that vibrations

of every frequency were constantly being exchanged between animals, men, and the earth—but this communication was only possible when everything was quiet. Life is absolutely dependent on quietness. Animals and birds depend upon it to make their living, to find their mates, to protect themselves from attack. Embryos still in the egg communicate with their siblings in adjacent eggs and so synchronize their hatching. Have you ever watched a robin lean down to listen for a worm? What happens to the radar of the bats, the trilling of toads, the prolonged symphonies of the thrushes when their home ranges are invaded by raucous man-made racket? For the most part, they give up.

Last fall I watched a string of sandhill cranes wending their way southward over their ancestral route, suburban Chicago, once a land of marshes and lakes and clean streams, now become a checkerboard of streets blanketed with polluted haze threaded with the webs of jets, helicopters and small planes. How much longer will the wild cries of the adults keep the young of the flock on course until they find a sanctuary?

When animals are made to listen to noise, they grow sullen, unresponsive, erratic, or violent. Is it any wonder we have violent, despondent, indifferent people when they cannot hear, in their neighborhood, the once familiar events by which they timed their day, conjured up visions of friends passing by, of tradesmen plying their routes, of church services, or children at recess? People need sounds to stimulate the joys of expectation, to reassure them that they are part of a system, a pattern, or to challenge them to be alert and observant—and to hear sounds, they need quiet.

It was James Russell Lowell who said “. . . heaven tries earth if it be in tune . . .” Who can tell, amid the cacophony of today, whether the earth be in tune or not? I suspect that dissonant worlds have a way of producing dissident people. Three years ago I was in Washington, D. C. and participated in the so-called “Poverty March” on “Solidarity Day”. It was a memorable experience. I found a lot of people sharing a lot of unhappiness, peacefully. We were not complaining just of poverty, hunger, discrimination, or bossism. Among us was a down-deep resentment for the kind of world that was being forced upon us. Few could epitomize their feelings — there was only a kind of vague malevolence threatening us, bringing us together.

As we stood there, several hundred thousand of us, hoping to hear some wise speaker who might diagnose the problem, the malevolence suddenly revealed itself as it broke out upon us from every direction as the careful, soulful, often beautiful, even crying words of the speakers received lash after lash of violent noise from descending jets, hovering helicopters, and flatulent buses. Reverend Abernathy’s cries of “soul power” were impotent in the face of noise power, in the swish and boom and scream of propellers and exhausts and sirens. Prayers, hymns, anthems, and even the courageous voice of Coretta King were cut down with impunity.

Little wonder, I wrote in my notes, that the people of America are becoming violent, sullen, plotting, and addicted—for they are being dominated by the technological impudence of machines.

Noise is the ultimate insult. It belittles us. It gives us nothing at which to strike back. It kills what is left of many things that we have loved—music, beauty, friendship, hope, and excite-

ment—and the reassurance of nature. Traditionally noise is used to ridicule, embarrass, denigrate, and curse—while silence is used for worship, respect, anticipation, and love. Do we hate each other as much as our noise level indicates?

Collapsing Rome didn't give a damn how much noise it made, anymore than we do. Read Juvenal—and weep with him:

Insomnia causes more deaths amongst Roman invalids than any other factor . . . How much sleep, I ask you, can one get in lodgings here? Unbroken nights — and this is the root of the trouble, are a rich man's privilege. The wagons thundering past through those narrow twisting streets, the oaths of draymen caught in a traffic jam—these alone would suffice to jolt the doziest sea-cow of an Emperor into permanent wakefulness.

Will the noise of modern man jolt the doziest sea-cow of all, the American city where the sounds of ancient Rome have been magnified a hundred fold? Unless it does, I see no future for man.

Whom do I blame? I blame no one. I blame everyone. I blame all the people, including myself, who have come to Chicago to find a place to live, a job to do, and in the process have destroyed nature and created a tumult of noise borne of their demands for every convenience and every novelty and every protection from exercise, from chance, from weather. We each demand too much. It is our demands that destroy us, that keep the trucks roaring and the jets rocketing and giantism proliferating.

Like the little ghetto girl who had seen nothing but boards all her life, we have become so used to living in this noise-torn world that we accept the dissonant and clangorous as part of our environment. We no longer recognize quietness, nor know how to use it. But while I am aware that living things can adapt to noise, as to other irritants, no adaptation is achieved without sacrifice. I think that if people ever rediscover quietness again, they will embrace it, like the little girl embraced her piece of tree, and treasure it as something that is not sawed and nailed and misshapen by man, but which contains within it some of the secrets of life and some of the explanation of why we are here.

Appendix: NOISE ABOUT NOISE

"Noisy St. Louis." *St. Louis Post Dispatch*, July 20, 1947. (Complaint: What is wrong with the engines and gears in St. Louis buses? Why does the street car motorman constantly clank his bell?)

Noise Stress in Laboratory Rodents. Paper No. 2379 in the Journal Series of the Pennsylvania Agricultural Experiment Station, late 1950s. (Intense noise stimulation at relatively low frequencies—140 db, 150-4800 cps—causes the appearance of a typical manifestation of increased emotionality or "anxiety-like" behavior in rats, mice, and guinea pigs. The most dramatic behavioral responses to noise were: intensive huddling of animals; freezing of rats and mice into a rigid, motionless stance; increased respiratory rate and increased washing and grooming by mice and rats . . . The second major finding was that intense low frequency noise results in increased adrenocortical activity. The major evidence came from the finding that mouse adrenals underwent hypertrophy [enlargement] following the noise exposure . . . Is noise a physiological stress? . . . The answer . . . is an unequivocal yes.)

"Supt. Garrison Seeks Solution to Yellowstone Boats." *National Wildland News*, April 1960. (Toward the end of the 1959 travel season, the superintendent of Yellowstone National Park . . . made public . . . the problem of power boats on Yellowstone Lake. "They create a commotion and a racket that destroys any shred of belief that this is the forest primeval or that it is other than a boating racetrack.")

"Sonic Boom." *Scientific American*, January 1962. (Can the booms be eliminated? The answer is a categorical negative; they are an inherent part of supersonic flight.)

"Silence, Please." *Michigan State News*, January 26, 1962. (Science has done wonders for the modern world, but it would be nice if it could work a little more quietly.)

"Jet Plane Noise Driving Ft. Worth School Underground." *The Denver Post*, December 19, 1963. (In a Ft. Worth suburb two miles from the airport, a new junior high school is being built underground. The school superintendent estimates that at present eight to ten percent of classroom time is lost to the sounds of jets taking off and landing. Acoustical consultants for the new building have devised a layer system for the roof which will deaden the noise of jets.)

"New York Town to Fine Jets for Noise." Item from Hempstead, New York, November 1964. (Complaint: Jets make so much noise they disrupt church service, disturb students in schools, prevent residents from relaxing, and make many so nervous they cannot work, eat, or sleep.)

"Silence Is Deafening As Sonic Booms Stop." *Rocky Mountain News* (Denver), August 1, 1964. (Complaints by the thousands poured in on the FAA and the Air Force, which flew the test planes. Broken windows, cracks in walls, and psychotic pets were blamed on sonic boom, and the FAA paid off close to \$10,000 in damage claims.)

"Let's Revolt Against the Tyranny of Noise!" *The Rotarian*, October 1964. (Someone seems to have turned up the cosmic knob that controls the earth's volume. In cities all over the world, noise is hitting a new decibelic and diabolic high. Once-peaceful communities now are suffering a crescendo of noise . . .)

"Noise Increasingly Important Problem with More People, Vehicles, and Planes." *The Daily Sentinel* (Grand Junction, Colorado), July 3, 1966. (Item from Alexandria, Virginia: This is a nice backyard . . . in what used to be known as a quiet neighborhood . . . Shrubs or fences can insure visual privacy, but there's no way to shut out the unceasing noise from heaven and earth, an inescapable fact in these summer months of outdoor living and open windows.)

"Donated Noise in Park." *New York Times*, October 22, 1966. (Concerning the gift of a carillon—a gift to the people which takes away a piece of publicly owned green space and replaces it with an expression of the donor's vanity. . . . Not only is our scant bit of green being blotted out by these philanthropists, but those of us who go to the park to get away from the blare of horns are assailed by sounds for which we are a captive audience. Bells ring on the hour and half hour, amplifiers blare out music, and we go from one sound and find ourselves walking into another.)

"Quiet Please!!" *Rocky Mountain News*, December 25, 1966. (Item from Paris: The French government launched an all-out nationwide war against unnecessary noise. Fines will be assessed to curb those Frenchmen disturbing the peace and quiet of others.)

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"Kupferman Introduces Bill to Curb 'Noise Pollution'." News release from office of Rep. Ted Kupferman, 17th Congressional District, N. Y., October 18, 1966. (. . . Physicians, psychiatrists, engineers, and researchers have written to agree with Congressman Kupferman that noise is a factor in many physiological and psychological disorders and have added their research to his already voluminous study of noise and its effects upon the well-being of the individual.)

"Caracas Noise Called Cause of Grouchiness." *New York Times*, December 11, 1966. (Item from Venezuela: "It's the terrible noise that has turned citizens from happy friendly people into grouchy people . . .")

"Jets Blamed for Damage to Cliff Dwellings." *Denver Post*, January 1967. (Military aircraft flying faster than the speed of sound have done damage to cliff dwellings in Canyon de Chelly National Monument in northeastern Arizona, geological formations in Bryce Canyon National Monument, and possibly to the remarkable cliff dwelling in Mesa Verde . . .)

"Trauma of Noise Shatters Home Tranquillity." World Book Encyclopedia Science Service, 1967. (Sonic booms, jackhammers, and garbage trucks may needle your nerves like a hypodermic. But it is the dishwasher, vacuum cleaner, and hi-fi that endanger disposition and health over the long run—so warns Dr. Lee E. Farr, Professor of Environmental Medicine at University of Texas . . .)

"Noise Pollution—More Than Just a Nuisance." *Audubon Guide*, February 1, 1968. From a report on environmental issues by the Conservation Foundation. (Almost thirty years ago the American Medical Association warned that "the multiple and insidious ill effects of noise constitute an inadequately recognized, baneful influence on the lives of millions throughout the country.")

"Noise—A Syndrome of Modern Society." *Scientist and Citizen*, March 1968. (Today's emphasis on visual perception has tended to diminish our awareness of the auditory character of our environment, and our auditory sense has tended to atrophy. We do not seem to realize that noise is not an inherent condition of existence, and have become permissive toward noise.)

"Freedom From 'Sound'." *Resources for the Future*, January 1969. (Noise used to be pretty much a localized phenomenon, a neighborhood nuisance perhaps, but not a city-wide or national affliction. Now we seem to be crossing over a threshold; generalized noise such as that coming from the interstate truck route or the flight path of jet planes commands increasing public attention.)

"City's Noise Pollution Nearing Danger Point." *Detroit Free Press*, July 6, 1970. (Detroit is noisy, and it's getting noisier each year. The people most bothered by noise are factory workers, many of whom become gradually deaf from constant workday din.)

"Toward a Quieter City." *Lansing State Journal*, January 23, 1970. (Item from a fifty-five page report from Mayor John V. Lindsay's Task Force on Noise Control says . . . "noise in New York has reached a level intense, continuous, and persistent enough to threaten basic community life.")

"Off-Road Vehicles Stir Storm." *Chicago Sun-Times*, July 25, 1971. (From an article by David S. Robinson about dune buggies, minibikes, snowmobiles: What has brought these popular recreation vehicles into such disrepute with nonusers? Probably the chief complaint is the noise. Although the noise excites some bike and snowmobile owners—apparently because of the power it signifies—it infuriates many others seeking quiet in the outdoors. "People who go to parks and forests go there for peace and quiet and relaxation. These vehicles just are not compatible with that and they never will be," says David Click, Deputy Director of the Indiana Department of Natural Resources.)