

VALDOMIRO PEIXOTO

# Quiet, Please

GORDON HEMPTON ON THE SEARCH  
FOR SILENCE IN A NOISY WORLD

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Gordon Hempton believes there may be fewer than a dozen places left in the United States — and none at all in Europe — where you can sit for twenty minutes during the day without hearing a plane fly over or some other noise from human activity. An acoustic ecologist, Hempton has traveled the globe for more than twenty-five years recording the vanishing sounds of nature — from the songbird chorus that greets the dawn to the crash of waves on a rocky shore; from the bugle call of elk in a mountain meadow to the drip of rain on a forest floor. He reports that the average daytime noise-free interval in our wilderness areas and national parks has shrunk to less than five minutes.

Hempton makes his home in Joyce, Washington, near Olympic National Park, a place he calls “the listener’s Yosemite.” It offers not only relatively long periods of undisturbed quiet but also a great diversity of natural “soundscapes.” Covering more than 1,400 square miles of the Olympic Peninsula, the park encompasses the longest wilderness coastline in the lower forty-eight states, the largest temperate rain forest in the Western Hemisphere, and a rugged interior of alpine valleys ringed by glacier-capped mountains. Olympic is home to more than three hundred species of birds, including northern spotted owls and bald eagles, as well as cougar, bear, salmon, Roosevelt elk, and at least eighteen species of animals found nowhere else in the world.

Hempton has designated a location within the park as the focal point of his “One Square Inch of Silence” campaign for the creation of a place totally free of human noise. The spot is marked with a small red stone given to Hempton by an elder of the Native American Quileute tribe. (On a trip through Olympic National Park with my sons I camped in the Hoh Rain Forest and hiked to within a mile or so of the spot. Though I didn’t know about Hempton’s campaign at the time, my sons and I did note that we and the other hikers were by far the noisiest presence in those ancient woods.)

Hempton won an Emmy for his documentary *Vanishing Dawn Chorus*, which aired on PBS. He is also the subject of the documentary *Soundtracker*, directed by Nicholas J. Sherman, which had its U.S. debut at the Sedona Film Festival in Arizona last February. Hempton is the coauthor, with John Grossmann, of *One Square Inch of Silence: One Man’s Quest to Preserve Quiet* (Free Press/Simon & Schuster), a chronicle of his ongoing attempt to convince legislators and regulators, particularly the Federal Aviation Administration (FAA), of the importance of protecting silence in our national parks.

I scheduled a telephone interview with Hempton to begin our conversation. At an hour past the time he’d said he would call, I still hadn’t heard from him. (“He’s into silence,” my husband said. “Maybe this is how he does interviews.”) When Hempton finally phoned, he explained that it was a stunningly beautiful

day in Washington, and he’d wandered outdoors and simply lost track of the time.

**Goodman:** How did you become interested in acoustic ecology?

**Hempton:** I was twenty-seven years old and on my way to graduate school in Madison, Wisconsin. At the end of a day of driving I pulled to the side of a road in Iowa and lay down between two rows of stubby cornstalks to sleep, to save myself the cost of a motel room. I listened to the crickets. Then I heard a thunderstorm booming from miles away. I continued to lie there and listen as the thunder got louder, and I let the storm roll right over me. I let myself get soaked. I simply took in the experience. There was no more driving I wanted to do, no more thinking, no more moving. I just let it happen.

When it was all over, I was left with one question: How could I be twenty-seven years old and never have fully listened to a thunderstorm before? I felt that I was missing out. There was something much greater that this life could afford. I ended up dropping out of graduate school, because nothing there seemed to measure up to the authenticity of that experience. I didn’t know what was ahead of me, but I knew what was behind me: a lot of student debt and a life that was no longer adequate. I wanted to become a better listener.

I found that the microphone was a valuable tool for improving my listening skills. The microphone hears everything, and when I would play back a recording, I’d discover how much I had missed in person. I jumped freight trains and recorded interviews with hobos. I interviewed punk rockers in downtown Seattle. I worked as a bike messenger in Seattle to pay my bills, and I started recording everything I could. Rather quickly I became immersed in natural places. They are so symphonic, so musical, so informative — and so hard to find. I realized that the recordings I was creating were valuable because the places themselves are disappearing rapidly, and one day people won’t be able to hear those sounds anymore.

I spent nine years recording in as many natural places as I could find. I tried to get a bank loan to document more exotic places before they vanished, and the bank officers laughed at me. So I’d earn as much as I could as a messenger and then take time off to make recordings. After ten years or so I got a grant from the Lindbergh Foundation, then another from the National Endowment for the Arts. When I won an Emmy, my career started snowballing, and I finally got control of my time. I was one of the few people in the world who’d recognized the value of natural “soundscapes,” and the only one who was recording them unedited. (I took the attitude that nature did not need improvement.) Meanwhile the world of soundscape studies gained recognition at Simon Fraser University, and the Acoustic Ecology Institute was formed, along



with the World Forum on Acoustic Ecology. Some people had started paying attention to changes in our acoustic environment.

**Goodman:** There's a line in the prologue to your book: "Silence is not the absence of something but *the presence of everything*." What do you mean by that?

**Hempton:** When you're in a place of natural silence, you're not alone, and you can feel it. Whether it's birdcalls from miles away or the proximity of a giant tree whose warm tones you can *feel*, there's a presence. It's a quieting experience.

**Goodman:** Are the sounds of people included in that "everything"?

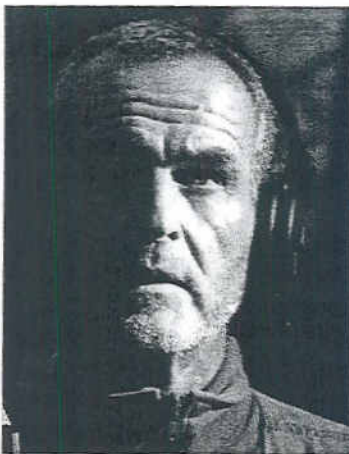
**Hempton:** They can be. The problem is that humans are often oblivious to the natural balance of sounds that has been established since the beginning of time. Imagine we're gathered to hear a symphony, and a handful of people are running vacuum cleaners or perhaps playing their own instruments without any regard to the orchestra. That's how human sounds often come across in a wilderness environment. I think of Campbell Lake in Pipestone Canyon near Winthrop, Washington, for example, which is a natural amphitheater. The lake and the surrounding hills amplify sound like a stereo speaker. I've listened many times to the sounds of the frogs there, and the killdeer and the blackbirds, and the drumming of the grouse, and the rustling of the aspen groves. That is the "silence" that is the presence of everything. But there is also a road that goes by Campbell Lake, and motorcycles roar past and echo through the canyon. They're taking that route because of its scenic splendor, but there is so much more that they're oblivious to because the noise of their engines overpowers it. Too often the sounds people make are just waste products of their activity, discarded like trash with no regard for the environment.

**Goodman:** Can you be a little more specific about how you define *silence*? After all, nature can be very loud.

**Hempton:** Yes, there are natural sounds that can be deafening — thundering surf or waterfalls. But most natural places on earth are quieter than even the quietest human place. The mechanized noise of modernity is excluded from "natural silence" for the same reason the janitor is forbidden to run the vacuum during the symphony: it's out of place. We take great care to build symphony halls with fabulous acoustics. If we took the same care with natural symphonies, perhaps we'd appreciate them more.

**Goodman:** Are there human sounds that are natural or otherwise not intrusive?

**Hempton:** There are sounds of human origin that are harmonious with the sounds of nature. I think of indigenous music — Tibetan chanting, Hawaiian slack-key guitar — whose pace is that of an easygoing life lived mostly out-of-doors. I think of an infant's coo when the breast appears or the sound of a child's voice. Footsteps, by and large, are a natural sound. But most of us make too much noise. In Sri Lanka I witnessed



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a monk leading a group of about seventy-five schoolchildren on a nature walk. That I saw this large group of children before I heard them was remarkable. The children were not chatting; they were not bringing another place with them. They were being in that place. Compare that to a group of mountain bikers carrying on a conversation about what happened last night at a bar while they're supposedly "experiencing nature." They're unconscious of their place. They're shouting because they're riding single file. Their chains are clanging. They're not part of the natural world they're traveling through. When you travel in natural harmony, you attune yourself with your environment.

Sound is a wave that passes through air, water, and even solid objects. Natural sounds generate a sinusoidal wave, with rounded peaks, which is easy on the ears. Many mechanized sounds are square or sawtooth shaped or have jagged edges. If you see them on an oscilloscope, you'll know why they're unpleasant to listen to.

**Goodman:** Why should the average person consider natural silence important?

**Hempton:** When people wonder whether they should take the time to pursue finding a silent place in nature, I often ask whether they've seen the Milky Way. Many have, but some haven't. When I look up at the Milky Way, it never fails to impress me. What a difference there is between talking about the universe and looking up and actually witnessing the galaxy of which we're a part — an ocean of stars so immense that, by comparison, the items on my ever-present to-do list shrink in significance, and I feel renewed awe and reverence.

Experiencing silence can be like that. In a naturally quiet place you can hear for miles. People who live in cities can often hear only a few hundred yards. In nature your sense of place is huge.

**Goodman:** What importance does silence have for species other than humans?

**Hempton:** For wildlife it's critical. Though some vertebrates are blind, all have the ability to hear. They're as busy communicating as we are, and if they have trouble sending or receiving signals, it can have fatal consequences. The little research that's been done on the impact of noise on wildlife shows that it definitely decreases some species' survival rates.

There are always several conversations occurring simultaneously in nature. Since the many species have evolved together over thousands of years, they've developed different frequencies on which to communicate, so that they can all send and hear messages at once. But when a loud, broad-spectrum roar enters the soundscape — traffic, for example, which is the number-one source of noise pollution in the world — all wildlife conversations become difficult. Unless the noise abates, they will have to evolve new voices, or new hearing, in order to communicate. And that is what is happening. Studies in Europe have found that entire populations of songbirds are changing their songs



to a higher frequency as a result of highway noise. In one study, when traffic was stopped for two years due to road repairs, one species returned to its original, lower-frequency song. (Lower frequencies carry farther.) In Canada the noise of gas lines has reduced the pairing success rate of ovenbirds by 30 percent. A study of the sage grouse has found that noise from oil-drilling exploration near the leks — the grounds on which they perform their mating rituals — has reduced their numbers by up to 50 percent.

In the oceans and waterways the consequences of noise pollution are even greater. The only aquatic-mammal extinction in the last fifty years — that of the Yangtze River dolphin — has been attributed in part to noise pollution from shipping traffic. I was recently in Hawaii to record the humpback whales off the Kona Coast of the Big Island. The whales had previously been driven off by U.S. Navy sonar, but the Big Island community had complained to the navy, and the navy had ceased its sonar operations in the area. Since then the humpbacks have come back in record numbers. My fiancée, Rebecca, and I paddled a couple of miles offshore in a two-person kayak, dropped a hydrophone, and had a listen. Wow. The humpbacks were so expressive, I can't even begin to describe their repertoire. Some sounds were definitely playful, even mischievous. Others sounded like a primate house gone mad. The whale songs I had heard on albums were flowing and musical, and I heard those too, of course, but there was much more variety than I'd expected.

The kayak enabled us to get quite close to the whales without disturbing them, but whenever a whale-watching boat approached — even when it was still miles away — the underwater noise caused the whales to change their songs and behavior. My interpretation is that they were anxious at the approach of the motor. After a while the whales resumed their normal vocalizing, but I must say that whale watchers on a so-called eco tour should understand that their boat's motor is possibly annoying or upsetting to whales.

**Goodman:** You've said that native sounds are an essential part of the identity of a place.

**Hempton:** Yes, as noise has increased and natural silence has diminished, places all over the world — particularly urban places — have lost their local identities. Every place in the world has begun to sound the same: like traffic. It's become harder to hear birds and other wildlife native to the area.

Although modern popular songs are typically about love for a person, folk songs are often about love for a place. Natural quiet allows us to fall in love with a place and appreciate how unique it is. Noise detaches us — not only from our sur-

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HOW COULD I BE TWENTY-SEVEN YEARS OLD AND NEVER HAVE FULLY LISTENED TO A THUNDERSTORM BEFORE? I FELT THAT I WAS MISSING OUT. . . . I ENDED UP DROPPING OUT OF GRADUATE SCHOOL, BECAUSE NOTHING THERE SEEMED TO MEASURE UP TO THE AUTHENTICITY OF THAT EXPERIENCE.

roundings but also from each other. Research shows that in noisy areas people are much less likely to help each other. That's one of the greatest lessons I've learned from being in natural silence: that we can begin to feel love for a place and, through it, for everything. This is crucial for the health of our planet because, when you love something, caring for it becomes effortless. Just as we care for the people we love without asking, "What will I get out of it?" so does love enable us to care for our world without running a cost-benefit analysis to see whether it's "worth it."

**Goodman:** You've written that, before entering nature, you go through a process to clear your mind and make it more receptive to silence. You might spend a night in the forest so that, by morning, your ears will

be "relaxed" enough and your mind clear enough to hear the river valley "singing." Are most of us oblivious to the sounds of nature because we're constantly bombarded with our own mental chatter?

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**Hempton:** Our mental condition reflects our external environment. Most of us live in cities, which are noisy, chaotic places. As a result we tend to have a lot of mental chatter, not all of it coherent. When you go to a naturally quiet place, you'll notice first how physically loud you are — voice, footsteps, food wrappers, Velcro, zippers — but then you'll notice internal noise as well. After a day or a week you'll experience an internal shift: your to-do list will fall away, your body will find its rhythm, your ears will attune themselves to your new surroundings, and your mental chatter will quiet. You will recognize unnecessary thoughts as just that — unnecessary — and become acquainted with the place you're in rather than staying inside your head.

**Goodman:** You blame "mental chatter" on modern life, but people have been trying to escape their thoughts for centuries.

**Hempton:** Some people, yes. It's related to the pace of life, which has not always been as fast as it is now. Go to a quiet place in nature, and after a few hours you will notice that your thoughts have slowed; you are no longer thinking in words but in feelings. The mind is capable of taking in enormous amounts of information when we let go of our mental filtering system and open ourselves to pure perception.

I know there are people who have difficulty experiencing silence. I'm not talking about tinnitus sufferers, who avoid silence because it accentuates the noise in their head. I'm talking about people who "like it loud" because it makes them feel as if they're part of "what's happening." I get that. Still, I encourage people to experience being uncomfortable with



silence — just as I encourage some people to experience the discomfort of being alone with their thoughts. If you avoid the discomfort, it remains. Stay with it, and silence will soften its rough edges.

**Goodman:** Noise pollution seems like a subjective complaint. Some people like living in cities and can't sleep in the country for the crickets. Isn't the ideal soundscape in the ear of the beholder?

**Hempton:** This is a version of the question "Isn't one person's music another person's noise?" The active-listening process — which involves what an individual chooses to give attention to and take enjoyment from, versus what he or she chooses to call "noise" — is subjective, but we also listen on a deeper, unconscious level. Even noises we learn to ignore have been demonstrated to be harmful. For example, we might sleep through passing trains or highway traffic, but the body still listens and releases stress hormones into the bloodstream. Similarly the unconscious is drawn to certain sounds. When I look at the sales of my sixty *Environmental Sound Portraits* albums, the most popular ones feature environments in which humans would be most likely to survive. In other words, listening to nature is in many ways a homecoming to an ancient history that is written in our DNA.

**Goodman:** I guess we can grow accustomed to a lot of things that aren't healthy for us. Look at our eating habits.

**Hempton:** Right. And we've largely resigned ourselves to the noise levels we live with — such as the noise of a refrigerator or an air conditioner — because we don't think there's anything we can do about it. It's been shown that even the average hospital room exceeds healthy noise standards.

Certainly people have their preferences regarding music and other sounds they like to listen to, but I do believe there is an "ideal" soundscape, and I've given it a name: "sonesia." It includes the sounds of wildlife, such as songbirds. It includes the gentle sound of insects and the sound of distant water. (Up close, rushing water can mask the other sonic elements of the environment.) All of these sounds are indicative of grassland, a savannah. That's where humans evolved, along with songbirds, which are the best indicator of an environment's suitability for human prosperity: where songbirds live, there is also sufficient food for humans. Humans are most sensitive to sounds in the 2,500 to 3,500 hertz range, which coincides neatly with birdsong. This might explain why, when we hear a birdsong, it sounds like music to us. After all, they don't sing for our benefit.

**Goodman:** Audubon's 2000 avian census reported that 25 percent of U.S. songbird populations are in decline.

**Hempton:** That's right. And their 2007 avian census warned that fifty-nine continental bird species and thirty-nine Hawaiian bird species are imperiled. Twenty formerly common birds are in serious decline, including the northern bobwhite, the evening grosbeak, and the eastern meadowlark. I believe

## LISTENING TO NATURE IS IN MANY WAYS A HOMECOMING TO AN ANCIENT HISTORY THAT IS WRITTEN IN OUR DNA.

that if we'd been *listening* rather than looking, we'd have reached this conclusion far sooner. The dawn chorus — the choir of birds vocalizing as the sun clears the horizon — has changed remarkably over the last several decades. I have recordings from the Mississippi Valley before these huge declines in bird species, and the sound reaches such a dramatic crescendo that it's overwhelming. In

ten minutes it goes from the single far-off hoot of an owl echoing through the hardwood forest to a dense chorus of countless birds all singing at once. At its peak you can't identify the individual species, but they combine to form a music that is so well-defined and has such a rhythm to it that it's all I can do to keep from dancing.

**Goodman:** What are some memorable experiences you've had in your search for natural silence?

**Hempton:** I visited the Kalahari Desert in 1990, and my tracker was a man named Bertis. I understood only two phrases that he spoke — "lion" and "no lion" — but we built a very meaningful relationship out of those two. [Laughs.]

The Kalahari is over a hundred degrees during the day and very, very dry, but the sounds were beautiful. One day we were driving, looking for a place to record. I selected a site and asked Dr. Liversedge, my interpreter and driver, to stop the Land Rover. As I began to get out of the car, Bertis erupted with a flurry of words. Dr. Liversedge told me, "Bertis says you cannot get out. There are lions." I looked around and saw nothing, so I asked how Bertis knew. Dr. Liversedge had a long conversation with Bertis and then reported, "Bertis doesn't know how he knows, but he knows."

I'd come halfway around the globe to get here, and there were no lions I could see, so I got out. I walked into the bush and was greeted by five lions. I back-stepped very slowly and carefully to the Land Rover.

I developed a great respect for Bertis after that. One morning in the Kalahari I got up in the dark and set up my recording gear to record the dawn chorus. I hung microphones and recorders up in two trees so that the hyenas wouldn't break them. Then I retreated back to camp. Later, when the sun came up, I went out to retrieve my gear, but I had no idea where it was: the Kalahari looked so different in the daylight. Twenty thousand dollars' worth of equipment was missing.

When Dr. Liversedge explained to Bertis what had happened, Bertis thought it was hilarious. He couldn't understand how someone could know where something was in the morning and then not know where it was later that same day. But when he saw I was serious, he looked down at my feet as if to study them. Then he turned and walked directly to my first set of gear in the bush about two hundred yards away. He found the second set of gear the same way and brought it all back to me, grinning the whole time. He told me, through Dr. Liversedge, that it was a wonder to him that I'd traveled halfway around the planet yet still couldn't do basic things for myself.



**Goodman:** You've said that children up to the age of five are "natural listeners" — aware of ambient sounds all around them. Can you talk a bit about the auditory skills we lose as part of our educational process?

**Hempton:** We are born listeners. We have to be. It's instinctual. When people ask me how to learn to be a good listener — which is actually a relearning process — I tell them to put a toddler on their shoulders and take a night walk. You won't be able to go two steps without the child asking, "What's that?" Then we send children to school, and the teacher says, "Listen to me," which means tune out everything else and focus on what's "important."

**Goodman:** Before we were urbanized, we needed to be able to hear the snap of a twig in the woods, because it might mean a predator was approaching. Now our hearing brings us mostly unwanted noise, so we walk around with iPods in our ears or with the radio blasting in our cars. We don't want to hear our environment.

**Hempton:** Yes, many people use their iPods to avoid hearing the noise pollution all around them. Our ancestors took quiet for granted; they never imagined that we'd lose it. Now we must recognize that we've largely lost quiet, even in our most pristine, natural places. But we can still choose to value quiet more as a culture.

**Goodman:** What would you say to someone who, rather than visiting silence in nature, simply puts on noise-canceling headphones in his or her loft apartment and listens to a recording of a natural soundscape?

**Hempton:** I would say that real listening is about being where you are. We escape our surroundings by putting on sounds that help us feel as if we were someplace else, but studies have shown that masking stressful noise is not a remedy. If you're in an unhealthy place, you shouldn't forget it. My recordings are not meant to be used for escape; they're meant to inspire people to get out of unhealthy environments. There's a big difference between the Hoh Rain Forest and a loft apartment: in one you're communing with nature; in the other you're tuning out the world.

**Goodman:** Isn't it true that to get to the pristine, silent places you describe, most people have to travel by car or plane? Wouldn't it be better if we all just stayed home?

**Hempton:** I don't know. On the one hand, the wildlife wouldn't miss us if we didn't visit. But the reality is that experiencing wilderness increases the chance that we will preserve it.

If you want to take a short day trip to experience quiet, pull out a map of NASA's nighttime view of the U.S. and look for places that are dark, because they're likely to be quiet too. Light pollution is the evil twin of noise pollution. One caveat is that in the Midwest and the West a lot of dark places are not quiet because of flight paths. You can also go online to Google Earth and check the area you're intending to visit for roads, power lines, railroads, active logging or mining activity — that sort of thing. The world is a busy place.

You don't have to leave the city to find quiet. I also enjoy being in an empty church. The architecture in older cathedrals

is often reminiscent of old forests. An empty concert hall is quiet. Libraries aren't as quiet anymore, but I often seek out chapels or meditation rooms in airports.

**Goodman:** What are the health benefits of quiet?

**Hempton:** Virtually all of the research that's been done — about five thousand articles — has been on the damaging effects of noise. There's very little research on the effects of quiet, partly because there's so little quiet available. What has been done suggests that quiet helps people relax, makes them more willing to help others, and enables them to do better on tests and to get a good night's sleep. Research with children who have attention-deficit (hyperactivity) disorder shows that experiencing quiet in nature is as effective for them as medication.

**Goodman:** What are some steps the average person can take to create less noise and to find silence?

**Hempton:** First of all, listen. Become more aware. Second, protect your hearing. The most readily available hearing protection is your fingers, but people like to have their hands free, so I recommend earplugs. Foam earplugs are inexpensive and can be used several times. If you are serious about hearing protection — the world today has become dangerously loud — I suggest you get a pair of custom-made earplugs that insert into the ear canal. I use mine all the time and would not travel without them. Incidentally you can carry on a normal conversation while wearing them. In noisy environments you're often better able to hear what someone is saying if you're wearing hearing protection. The earplugs reduce the overall decibel level, which makes human speech more audible.

Third, speak out for your right to quiet. Too often people believe there's nothing they can do about noise — it's part of the community they live in — but it's important to let people who are creating loud noise know how it's affecting you. Tell your noisy neighbors the ways in which their noise is decreasing your quality of life, and let them know what you are doing to reduce your own noise making.

**Goodman:** I think people try to tune out offending noise because they want to avoid conflict with others.

**Hempton:** We're living in a world where we're sharing resources, and one of the most shared is the acoustic environment — even more so than the visual environment. And yet there are few codes that affect the acoustic characteristics of a community. Noise-abatement walls along interstates reduce noise very little. The issue of noise pollution could unify communities.

**Goodman:** Or tear them apart.

**Hempton:** It does seem as if those who want it quiet and those who like to be loud might have irreconcilable differences. We might need to create separate quiet communities and noisy communities.

**Goodman:** I think of the example of a car stereo so loud that it sets off car alarms. That's not an experience that brings people together.

**Hempton:** Actually the effect of low frequencies, such as those from the bass of car stereos, is a whole subject in itself. The pleasure center in the brain is stimulated by low frequen-





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cies. So, yeah, the owner of the car stereo feels good, whereas other drivers may feel annoyed. There are noise ordinances in some communities that fine drivers for being too loud.

**Goodman:** The dinner table in one culture may be quiet, whereas in another the table might host loud, raucous conversations. Is "quiet" culturally defined?

**Hempton:** I think so. Some modern cultures almost seem to glamorize noise. Third World countries have lower fossil-fuel consumption per capita, so overall they're quieter, but the cities in Third World countries have noise levels that far surpass our own. Even rural towns are noisy. In Nicaragua the bus will arrive at five o'clock in the morning to pick up the workers, and not only will the muffler be loud, but the bus will be honking its horn, because it's the alarm clock for the community. I believe the townspeople like this, partly because all these noises — buses, radios, cellphones — are still a novelty in the Third World, just as airplanes once were in our country. When barnstorming — flying low to the ground

— was popular, most Americans had never seen a plane up close, and even fewer had been in one. But times have changed, and jet noise is now an annoyance and even a public-health problem.

**Goodman:** Some spiritual teachers speak of the need for silence in order to hear one's inner voice or the voice of the divine.

**Hempton:** People who live in noisy urban places often tell me they can still reach inner silence through meditation and prayer. There is an inner silence that is available to us no matter where we are. But when I'm in a place where I'm able to hear for a thousand square miles — such as in the Kalahari Desert — that's transformative. In silence like that we remember our genetic roots, our purpose, and our connection to all things.

It is in stillness, whether in a natural or an urban place, that the answers to spiritual questions and environmental problems are revealed, which is one reason we need to preserve our quiet places and not rely solely on inner silence. We



go to these natural places with our long list of things to do in our mind, in our nervous system, and maybe even in our back pocket, but when we hike back out, that to-do list is much shorter.

**Goodman:** You're campaigning for one square inch of silence. Realistically, what difference can one square inch make?

**Hempton:** The One Square Inch of Silence Foundation is currently seeking to establish a twenty-mile-radius no-flight zone over Olympic National Park. This area will be off-limits to all aircraft except for search-and-rescue missions and medical evacuations. If we're successful, this will be the first U.S. airspace made off-limits to aircraft for civilian reasons.

You'd think that quiet would be an attribute of all of our national parks, but the average noise-free interval during the day in a national park is now less than five minutes. At Yosemite in 1992 aircraft noise was audible most of the time. There are more than ninety thousand air tours each year over Grand Canyon National Park. The quiet at Olympic Park is rare, and that's the reason I chose it as the location for One Square Inch of Silence.

The idea came to me one day in 1989 when a jet passed overhead, and I realized that this one source of noise, thirty-six thousand feet in the sky, was destroying more than a thousand square miles of silence below it. An airplane is audible in a radius of twenty miles in every direction. The FAA acknowledges that a plane can always be heard on the ground, no matter how high it flies. The noise can be masked by other sounds, but if it's quiet where you are, you will hear the plane. I thought to myself, *What if we were to maintain absolute silence at a single point — one square inch of the planet earth?* The result would mean managing or limiting noise pollution for an area of about a thousand square miles.

So I got a grant from the Charles A. and Anne Morrow Lindbergh Foundation, and I passed my research along to the National Park Service, which was charged by Congress with limiting national-park overflights, but the park service didn't act on it. In fact overflights are increasing, and now many national parks have air tours as well, so it is even more difficult to find silence.

Then in 2003 I lost my ability to hear. You can imagine how devastating that was for me. It meant I'd lost my job, my definition of myself, my primary reason for living.

**Goodman:** It's ironic that this would happen to a man so obsessed with sound.

**Hempton:** It changed the direction of my life. I do not know, nor do the five doctors I consulted know, what brought about my deafness. I lost my hearing over the course of two

A JET PASSED OVERHEAD, AND I REALIZED THAT THIS ONE SOURCE OF NOISE, THIRTY-SIX THOUSAND FEET IN THE SKY, WAS DESTROYING MORE THAN A THOUSAND SQUARE MILES OF SILENCE BELOW IT. AN AIRPLANE IS AUDIBLE IN A RADIUS OF TWENTY MILES IN EVERY DIRECTION.

weeks, and the deafness lasted approximately eighteen months. But my world was not silent. There was a ringing in my ears that nearly drove me crazy. The natural silence I loved was gone, and I thought I would never experience it again. It was not only professionally devastating; it brought me to the edge of emotional ruin. But I had a role model in John Muir, the father of our national-park system, who lost his eyesight as a young man in an industrial accident. He vowed that if he ever got his sight back, he would devote his time to the "inventions of God" rather than the inventions of man.

Then in the spring of 2005, just as spontaneously as I'd lost it, I got my hearing back — and, along with it, my career. At that point I thought maybe it was my job, and not the park service's, to make the One Square

Inch of Silence project happen. I chose Olympic National Park because it has little air tourism and relatively few commercial flights that cross it. It has no through-roads and no scenic drive to its highest peak. To reach its backcountry, you must go on foot.

I dedicated One Square Inch of Silence on Earth Day 2005. Alone, I placed a small red stone, a gift from an elder of the Quileute tribe, on a log in the Hoh Rain Forest approximately three miles from the Olympic National Park visitors' center. I also left a jar where visitors could leave their thoughts while visiting One Square Inch, but the park's management has since removed the jar, saying I don't have a permit.

The project has changed my life yet again. It prompted me to write a book; to become more involved with people; to travel the country to speak with lawmakers and FAA and park-service officials; in general to leave my comfort zone. Prior to writing the book, I had lived and worked alone in the wilderness. For me it was a tremendous challenge to adapt to a crowded urban environment and interact with large audiences, but we're not here to do just what is easy or convenient. Though it is important and precious to be able to lie in the forest, free of all concern, life also requires us to jump into the fray and participate in the excitement. I now spend a lot less time in the wilderness and a lot more time on the phone or in front of a computer or flying to give a presentation. There's a balance I'm trying to achieve.

**Goodman:** Your fiancée is deaf. How did you meet her?

**Hempton:** She was my daughter's high-school math tutor. The fact that I fell in love with her is again one of life's surprises. She teaches me that this world also includes a universe outside of sound.

Rebecca is one of the best listeners I know — because there's a difference between hearing and listening. Many people who



hear perfectly are listening-impaired. To really listen is to open up to everything coming in. That's what deaf people have to do: open all their other senses and take in every piece of information. Unfortunately for those of us with normal hearing, if there's a lot of noise, we tune out, and we miss much of what's there.

**Goodman:** Do you know sign language?

**Hempton:** No, Rebecca was deaf in one ear at birth and hearing-impaired in the other. She has been almost completely deaf for many years, but because she once had partial hearing, her voice sounds fairly normal.

She and I were walking on the beach one day with the surf crashing in the background, and we were having a conversation. I was having a hard time hearing her because of the surf, but she wasn't having any problem understanding me because she was reading my lips. I asked her about it, and she described all the clues she uses — context, body language, hand gestures — which inspired me to ask if she could “lip-read” nature. There are many visual signs in nature that tie directly to the music of the changing conditions. Now we are working on a project: “Lip-Reading Nature: A Practical Guide to ‘Hearing’ Nature’s Music.” We delivered it in April to the American Academy of Audiology in San Diego.

Our relationship has revealed to me the significance of visual cues. Rebecca will interpret certain body language as yelling, even if I’m speaking at normal decibels. It’s the energy, the passion I feel about what I’m saying that she picks up on. Sometimes our situations can be quite comical. For example, I’ll walk in the house and find the smoke alarm shrieking and the teakettle whistling, and she’ll look up from her book and smile calmly, unaware of either noise.

Two years ago Rebecca received a cochlear implant, which is marketed as a miracle — and for people who have lost their hearing fairly recently, it may well be, because their brains can properly interpret the signals transmitted by the implant. But for someone like Rebecca, who has never really heard clearly, the signal the implant feeds her brain is like the one a fax machine sends a phone: it’s just noise to her. So Rebecca hears all birdsong as an annoying chirp. Rain, running water — it’s all just a chirping in her brain. When she first “went live” with her implant, she experienced sound as an electric shock to her jaw. Not accustomed to receiving information from the auditory nerve, her brain made the assumption: *This must mean jaw pain*. Through experience and practice, her brain has made sense of the nerve transmission, but it’s a long, slow process. She’s probably never going to hear the way you and I do. Instead she must recognize the relationships between sights and sounds. For example, she’ll be able to stand with me beside a stream and understand that the wider the river, the larger the amplitude of the sound wave. She will be able to walk the length of a river and hear its song — from snow melting into trickling water at its birth, through its babbling infancy, boisterous youth, and meandering old age before it joins the ocean. She’ll have access to an entire world that she didn’t know existed — and that many hearing people don’t know exists either.

**Goodman:** Doesn’t your campaign for silence set you in opposition to civilization?

**Hempton:** Not necessarily. Noise is a sign of inefficiency. As technology evolves to become more and more efficient, shouldn’t it also become quieter and quieter? As we continue to develop as a civilization, we can choose between creating a sonic environment akin to a garbage dump or one akin to a garden. For a long time there was enough land on earth that we could have our gardens over here and our garbage over there, but no longer. Yet I don’t believe any sane person is going to choose the garbage dump over the garden.

**Goodman:** How do you keep from being angry at people who break the silence?

**Hempton:** Many people say to me, “I bet when jets fly over the wilderness, you must be giving them your middle finger,” but that kind of reaction comes from a noisy place. I come from a quiet place. I can hear the jet and think to myself that the airline companies and the passengers are just flying without thinking. Someday they are going to think about it and fly *around* our wilderness areas.

**Goodman:** The primary reason airlines give for breaking the silence in Olympic National Park is energy efficiency.

**Hempton:** It’s true, there’s only one direct path between two points — say, Seattle and Anchorage. Every other path is less efficient. Yet airlines operate on many flight paths, so efficiency is only one criterion they use. Safety is another, and so is convenience. Ground-based navigational beacons have made certain flight paths more convenient. Jet traffic over the Southwest, for example, goes over the Grand Canyon *by design*. But as the airlines switch to a satellite-based navigational system, they will have the opportunity to reset their travel paths and take national parks into account, if they so choose. It’s a matter of priorities.

We already have restricted airspace over military installations — Area 51 in Nevada, for example. We’ve made that a priority. We’re already willing to reroute aircraft to avoid thunderstorms, or military maneuvers, or heavy air traffic, or to allow for wind direction. What would be the cost to maintain this twenty-mile-radius no-flight zone? We know from the Air Transport Association data that in 2006 the cost of keeping a Boeing 737 in the sky was sixty-six dollars per minute. That covers maintenance, fuel, staff, everything. For commercial jetliners to avoid Olympic National Park it would cost less than one dollar per passenger. It is far less significant than wind direction.

**Goodman:** Given the severe environmental challenges we face — from habitat destruction, to species extinction, to global warming, to ecosystem collapse — isn’t the pursuit of silence a bit of a quixotic undertaking?

**Hempton:** No, because it’s in quiet places in nature that we are best able to answer those other important environmental questions. We think they are more important than quiet, but it’s quiet that can make us fall back in love with the earth. It’s quiet that can give us the joy of knowing that we’re doing the right thing. As we approach the hundredth anniversary of the U.S. National Park Service in 2016, we need natural quiet more than ever. ■