WISH YOU WEREN'T HERE

This summer millions of people will visit our national parks, expecting to hear—quiet. Are they ever in for a rude awakening.

By Ted Williams

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April 23, 2007: On this day of sleet and snow, air tours have been canceled; tourists hunker in the heat of vehicles and lodges; and for the first time I *hear* the Grand Canyon.

The National Park Service values quietude and, as part of its effort to preserve what little is left here, has gated off the road to Yaki Point. Filtering through pinyon pine and juniper and stepping over crimson clumps of devil's paintbrush, Dick Hingson, natural quiet/overflights specialist for the Sierra Club, and I hike to the rim. The canyon walls glow pink, red, orange, yellow, purple, and violet. To the east a shaft of afternoon sunlight sets ablaze the orange sandstone of Newton Butte. Zoroaster Temple and Wotan's Throne soar above tumbling clouds. A mile below us shadows clutch 1.8-billion-year-old gneiss and schist.

Preservation of such natural landscapes is part of the National Park Service's mission. But so is preservation of what the agency calls natural "soundscapes." Today the silence of this park seems strange, like when a power outage kills the hum of your refrigerator. But the termination of unnatural din and even the manmade noise my brain had filtered out allows the sounds of nature to reappear—the distant croak of ravens, the stirring of conifer needles, the rustle of unseen birds, the whistle and lisp of mountain chickadees, the scratching of rodents, the canyon wind. . . . On rare days like this you can even hear the Colorado River from Pima and Yavapai Points.

By law the Park Service must protect natural soundscapes in all our parks, but even in these sanctuaries that resource is being destroyed by such noise polluters as aircraft, buses, off-road vehicles, snowmobiles, and jetskis.

Hingson sits on the 19-member, multi-interest working group that's supposed to help the Park Service and the Federal Aviation Administration (FAA) meet their joint mandate under the 1987 National Parks Overflights Act: "restoring natural quiet" to Grand Canyon National Park by 2008. It's not going to happen. This despite the fact that the Park Service has defined "natural quiet" as half-silent for 75 percent to 100 percent of the day, and has imposed an enormous handicap that discounts the first 10 decibels of din in the developed area, from the park boundary north to the south rim (including everything along the east and west rim roads), the Bright Angel Point developed area on the north rim, all of the Marble Canyon part of the park from Saddle Mountain north to Lees Ferry, and the park's entire western third.

"Noise increases exponentially, not linearly," says Karen Trevino, director of the Park Service's Natural Sounds Program Center. "In any given area an increase of three decibels reduces our ability to hear by 50 percent. That means that if I can hear a bird singing 100 feet away and a noise intrusion raises the ambient baseline by 3 decibels, I would have to move to within 70 feet of the bird to still hear it. People often assume that a 5- or 10-decibel increase is insignificant or barely noticeable. That's not the case."

If the only source of noise pollution were the tour flights, the park would meet the pathetically modest goal of being a little less than half noisy at least three-quarters of the time. But the steady parade of jetliners overhead renders it 99 percent out of compliance. When the FAA proclaimed that it shouldn't figure in jet noise because it was "de minimus" (trifling), the Grand Canyon Trust, Sierra Club, Wilderness Society, National Parks Conservation Association, and others successfully sued. "It wouldn't be much of a problem to move the jet route 5 or 10 miles south," says Hingson. "That would be a huge help, but the FAA won't hear of it."

Early on April 24 the park is reinvaded by sunlight, warmth, insects, tourists, and noise. Hingson and I hike to the Zuni Corridor—one of the broad swaths over which tour flights are allowed. We sit on deadfalls where I record the soundscape on a notepad: a tour-flight Twin Otter at 11:05 a.m.; another prop plane, higher, possibly general aviation: 11:06; insect: 11:08; commercial jet: 11:09; insects: 11:10; birds: 11:11; car: 11:14; bird: 11:15; insect: 11:15; birds and car: 11:15; tour-flight helicopter, very loud with rotor slap: 11:17; another even louder helicopter: 11:18; bird: 11:19; helicopter and Twin Otter: 11:20; rodent: 11:22; insects: 11:25; bird: 11:25; jet: 11:26; bird: 11:26; jet: 11:28; insects: 11:30; car: 11:30; Twin Otter: 11:31; insect: 11:32; jet: 11:33; birds: 11:34; jet: 11:34; bird: 11:35; insects and birds, much more noticeable in this lull: 11:35 to 11:39; wind freshening in canyon: 11:40; helicopter: 11:42; jet: 11:48; jet: 11:52; helicopter and Twin Otter: 12:13; Twin Otter: 12:23.

"By June this air-tour traffic will double," says Hingson. "And the Zuni Corridor is nothing compared to the Dragon Corridor, where helicopters can go to the north rim and back again." In 1994 the Park Service recommended closing the Dragon Corridor, where air tours pass over wilderness trails. The FAA refused. Next the Park Service tried to make the corridor one-way. The FAA went into permanent stall mode.

Opposing missions of the two agencies make the forced marriage unhappy and unworkable. The Park Service's 1916 organic act requires it to "conserve the scenery and the natural and historic objects and the wild life [of the parks] and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations." A large part of the FAA's once-official and now self-assigned mission is the promotion of air traffic.

As bad as it is now in the Grand Canyon, it will get lots worse. The park is hammered by roughly 55,000 tour flights a year, but the FAA has set the allotment at 93,971. Meanwhile, Las Vegas is planning a new airport (almost abutting the Mojave National Preserve) that will further damage Grand Canyon soundscapes. Seeking to preserve their impossible dream of unlimited growth, Nevada politicians supported helicopter-tour operators when they professed to be bothering no one save a few Grand Canyon backpackers. But so many Las Vegas Valley residents complained about the racket that the legislature funded a Southern Regional Heliport to get the tour operators away from town.

The Grand Canyon is just one of 91 national park units collectively blighted by about 365,000 tour flights a year; according to the FAA, this figure will increase over the next decade to at least 2 million. The Overflights Act of 1987 spawned the National Park Air Tour Management Act of 2000, which requires the FAA and the Park Service to design management plans for each park unit where air tours happen, except Grand Canyon National Park (covered by the 1987 legislation), Rocky Mountain National Park (where tour flights are banned thanks to activists led by the League of Women Voters), and park units in Alaska. Until plans are in place, air-tour operators are grandfathered at the existing numbers of flights, which the FAA determined by asking them and which are therefore every bit as accurate as "usual bedtimes" reported by children to their babysitters. The Park Service, which politely calls the numbers "inflated," heard from operators who claimed to have conducted tours

over units that are caves as well as units that hadn't existed at the time of the alleged flights. Even today the FAA chooses not to require operators to even report the number of flights they make or the routes they take. According to the Government Accountability Office, this lack of record-keeping is depriving the cash-strapped Park Service of income it needs to help restore natural quiet. When the GAO looked at 21 tour operators from 2000 through 2003, it found that 13 hadn't paid their required fees.

Seven years after passage of the Air Tour Management Act, the dysfunctional dual-agency management team has yet to hatch its first plan.

Heads sandwiched between headsets, Hingson and I find more quietude looking down from a Twin Otter than looking up at one. Grand Canyon Airlines, the park's first air-tour operator, now in its 80th year of service, announces on its inflight tape that because it wants to be a "good neighbor" it has installed "low-noise propellers." I've flown in lots of Twin Otters, and if there's a difference, I can't detect it. Drifting over the park at only 100 mph, we peruse it through "panoramic windows," as if we were seated in an IMAX theater (which Hingson figures would be better for everyone). Visibility is impeded only by the curvature of the earth. Snow blankets the north rim. The Little Colorado River runs turquoise. The finest old-growth ponderosa pine stand in the nation stretches across the Kaibab Plateau. To my surprise, Hingson allows that some of this kind of air touring "might be appropriate" for 1,218,375-acre Grand Canyon National Park. "Ration it, though," he says. "Like we ration mule trips and lodging."

But each park is unique. How appropriate are air tours for, say, 37,277-acre Bryce Canyon National Park in Utah, about 60 percent of which is proposed for designation as federal wilderness "where the earth and its community of life are untrammeled by man"? I found out on April 25, 2007. The helicopter tour I took—with Bryce Canyon Airlines—was much louder and bumpier than the ride I'd had in a fixed-wing plane over the Grand Canyon, and it didn't offer any advantage I could see. We flew low and close, blasting backpackers on wilderness trails. The big draw of helicopters is more the amusement-park-style ride than scrutiny and contemplation of grand landscapes.

The park's aptly named "amphitheaters" are crowded with hoodoos—tall, impossibly precarious pillars of limestone, all brilliantly colored by oxidized minerals (red, pink, and orange from iron; purple from manganese; white from limestone). The Paiute Indians identified them as "legend people" turned to stone by Coyote. Back on the ground, I contemplated these and other features from a vantage point halfway up the rim trail on the west end ironically named Silent City. Eighty-two miles to the south Navajo Mountain rose through immaculate air, looking close enough to hit with a frisbee. At mid-elevations the bases of the hoodoos were rimmed with snow. Pinyon pine, juniper, Gambel oak, and yucca clawed their way up from the gray, 60-million-year-old bottom of the Cretaceous Seaway. Higher up they gave way to ponderosa pine and manzanita. Bristlecone pines adorned white limestone knolls. The mood of this special spot is not enhanced by the constant beep of backing tour buses I kept hearing, nor the drone of tour planes and the roar and slap of helicopters—all concentrated and reflected by the park's biggest amphitheater.

Life itself is dangerous, but it struck me that it wouldn't be much more so if the park made the bus drivers at Bryce turn off their beepers or asked them not to back up. And while there's little of the park you can see from the air that you can't see from the rim trails, 15 companies currently offer 3,448 air tours a year, and six new applicants are requesting 956 more.

Guiding me were Bryce Canyon National Park's resources chief Kristin Legg and physical scientist Chad Moore. Both are young, idealistic, and passionately committed to the restoration of natural soundscapes. But with the FAA's abject disinterest in nature (it thinks of noise in terms of urban airports) and the starvation diet on which the Bush administration has placed the Park Service, the process moves at the speed of continental drift. The park has yet to analyze sound data it has been collecting since 2002. "We're looking at all types of noise for our soundscapes management plan," declared Moore. "It's like peeling an onion; if you remove one dominant source, something else becomes dominant. We're going to be addressing and prioritizing all sources. We're going to figure out visitor expectations and decide what our goals are as managers and executor stewards of this land."

Bryce is a work in progress. Ice forms here 200 days a year, and the relentless cycle of freezing and thawing is still sculpting sandstone. When human-generated din abates long enough, you can hear the park evolving. Usually it's just pebbles trickling from cliffs and hoodoos, but on December 21, 2006, Moore and park ranger Angie Richman were snowshoeing the Paria ski trail when they heard what they thought was thunder. As they gained the rim they saw that the whole amphitheater was filled with red dust. A hoodoo had toppled. Seven months earlier 300 tons of rubble had fallen on the Navajo Loop Trail, providing an auditory perception of park evolution more graphic than anyone could have hoped for (especially the hikers who narrowly escaped with their lives). The trail is still closed, but Legg plans to reroute it on top of the debris and put up interpretive signage.

For some visitors—me, for example—the park's 200 bird species are even more important than its geologic features. Birders identify most birds they encounter only by their vocalizations, and when you see a bird it's often because you heard it first. I would not have seen the Townsend's solitaire perched atop the tall ponderosa pine had I not detected its soft, bell-like call. But how many had I missed?

Human din doesn't just hurt birding, it hurts birds. Studies in Canada's boreal forest reveal that near oil and gas rigs a disproportionate number of male birds fail to establish territories and are less successful in attracting mates, and that for those that manage to do both, nesting success is much lower. The Park Service reports that unnatural sounds suppress immune systems, increase stress-related hormones, and drain birds of critically needed energy by forcing them to vocalize louder to attract mates, defend territories, and warn of predators.

Tour flights are just the most pervasive—not the only or even the most obnoxious—source of park noise pollution. Others include snowmobiles and off-road vehicles and, the clear leader in inappropriateness, jetskis—a.k.a. "personal watercraft" (PWC).

Don Barger—the National Parks Conservation Association's southeast regional director and a member of the Overflights Advisory Group established by the 2000 legislation—offers this: "As we [the association] were looking at jetskis we went through a lot of machinations until we realized they're thrill-craft. Riding a jetski is not about getting access to somewhere, and it's not about the place you're in. It's about the craft you're on. The enjoyment, defined in the Park Service's organic act, is enjoyment of the resource. With a jetski it's enjoyment of the jetski."

"Studies have suggested that PWC sound is different from that of motorboats," reports the Park Service. "The most important difference is that jetskis continually leave the water. This magnifies their sound impact in two ways. First, minus the muffling effect of the water, the PWC engine's exhaust can be more than 15 decibels louder than a motorboat. Second, each time the PWC reenters the water, it smacks the surface with an explosive 'whomp.' "

But such features are selling points. Consider this promo offered by Seadoo: "You'll be digging into turns and beating your friends across the lake with no mercy. . . . It's like riding a jet powered go-kart. Circle a small island in KART mode. It'll feel like a high-banked speedway. Ride it like a motocross bike, leaning into liquid turns. Get a face full of water instead of dirt. Do it for an hour or so."

Whatever can an agency charged with preserving nature "unimpaired" be thinking by welcoming such machines? "Informed delight, not feckless merriment" is how President Clinton's Park Service director, Roger Kennedy, accurately defined the "enjoyment" mandated by the organic act. Under his leadership the Park Service banned jetskis everywhere save 21 units that could allow them for a two-year grace period during which they were to determine, by rule-making process with public commentary, if jetskis would stay or go. Six park units—including the Cape Lookout, Gulf Islands, and Cumberland Island national seashores—banned them forthwith.

But on April 20, 2001—a year before the grace period was to end and before any unit had finalized a rule—Pat Hooks, the Park Service's southeast regional director, sent her staff this memo about a discussion she'd just had with the Washington office, now run by Bush appointees: "Effective immediately, there is to be no additional enforcement of the ban on the use of PWC at either [sic] of the three seashores. No public statement need be issued reversing the compendiums or other positions at this time. If asked, the response is to be: We are 'DELAYING IMPLEMENTATION PENDING FURTHER REVIEW.'"

Carrying much of the water for the mechanized recreation industry at the Interior Department has been deputy assistant secretary Paul Hoffman, longtime crony of Vice-President Cheney. As director of the Cody, Wyoming, Chamber of Commerce and the Cody Economic Development Council, Hoffman had spent 12 years whooping it up for snowmobiles, and when the Wilderness Society got him recused from promoting this type of thrill-craft in Yellowstone, he latched on to jetski promotion. At this writing, jetskis are authorized in 13 park units (in many cases against the will of supervisors) and about to be authorized in a 14th.

The Bush administration has been equally successful in undoing its predecessor's progress at limiting snowmobiles, now authorized in 42 park units. Nowhere is snowmobile use more contentious or inappropriate than in our first and most beloved national park. On November 22, 2000, the Clinton administration issued an environmental-impact statement and record of decision that would phase out snowmobiles in Yellowstone. The Bush administration promptly halted that process, and on November 4, 2004, issued a finding of no significant impact for its preferred alternative of 720 snowmobiles per day—a threefold increase of the number now entering the park. Bill Wade, former superintendent of Shenandoah National Park and now director of the Coalition of National Park Service Retirees, likens this to "shooting skeet in the Sistine Chapel."

Park rangers at Yellowstone have suffered hearing loss from snowmobiles. The agency's own data reveal that they imperil such wintering wildlife as bald eagles, trumpeter swans, elk, and bison, and that even the required four-stroke models dominate the soundscape 60 percent to 80 percent of the winter at Old Faithful and 75 percent at Madison Junction.

"More traffic inherently causes more disturbance because Yellowstone's wildlife need these specific habitats as they struggle to survive the park's winters," warns Rick Smith, the park's former acting superintendent. "Science has been underscoring this important fact in Yellowstone for well over a decade. It's a travesty that the administration is failing to tell the American public that the professionals say that we need to protect the animals residing in one of the world's great wildlife sanctuaries."

On March 26, 2007, seven of the eight living former Park Service directors sent a letter to Interior Secretary Dirk Kempthorne, urging reduction of snowmobile traffic in Yellowstone and expressing "alarm" over his proposal

to increase it. The one missing signature was that of Fran Mainella, who resigned in July 2006 and was constrained for a year by ethics rules.

"Parks are for people," as the old bromide proclaims—but not for people who disrupt ecosystems and soundscapes. The "dual mandate" you hear so much about, most often from motorheads and bureaucrats they've frightened, does not exist. Those who believe otherwise don't understand our language. "Dual mandate" is all you need utter to jump-start an interview with the National Parks Conservation Association's Don Barger. First he will take a deep breath and gather his composure. Then he will say in his soft southern accent, as he said to me: "I hate that term. The Park Service's organic act was this nation's first commitment to sustainability. We were right in the middle of the industrial revolution. German zeppelins were bombing Paris. It was the first time we said out loud that there are places so special that they need to belong to everybody and last forever. I can rephrase the organic act without changing its meaning so it reads: 'The purpose of the national park system is to provide this and future generations with the enjoyment of unimpaired natural resources.'"

Barger has it exactly right. When the Park Service provides enjoyment to most air-flight tourists and all thrill-craft operators, it impairs natural resources. When it impairs these resources, it fails to provide the kind of enjoyment required by law.

On June 19, 2006, Interior Secretary Kempthorne issued the following proclamation: "When there is a conflict between conserving resources unimpaired for future generations and the use of those resources, conservation will be predominant." If he didn't have his fingers crossed, now would be a good time to start proving it.

What You Can Do

To learn more about the Park Service's program to restore natural soundscapes, click here. The FAA Reauthorization Act will likely have language that requires air-tour operators to report flights and routes over national parks. Ask your legislators not to let that language get weakened or deleted.