

within. If you want to capture the grunting and splashing of mixed wading birds at a Ding Darling feeding frenzy, you've no choice but to get away from the herd.

Getting pure audio is yet another challenge. It is the absolute bane of professionals—in a conservative nine-tenths of the significant footage one gets, the audio is ruined by motor sounds or barking dogs or distant Dempsey Dumpsters. Almost nowhere in North America is one out of earshot of motor sounds for more than a few seconds at a time. Fortunately, the sound track you're likely to need for home reference and analysis can stand a few hits of intrusive sound and still be useful.

It is in the audio dimension that a significant difference separates the broadcast realm from the consumer. I don't know of a consumer camera that can accept a signal from a remote microphone, and then the microphone, to produce a quality sound recording, must be off the camera. It must also be directionally focused or must be close to the sound source. The problem with small microphones mounted on the camera is that they pick up the lens' servomotor whines and the fumbling, breathing, and lip smacking noises of the operator, as well as ambient jabber from all directions. You can't operate the camera without touching it and you can't touch it without registering an intrusive noise.

If you find that you really need good sound recordings to get the kind of information you're interested in from your consumer video camcorder, you'll have to navigate around the audio dilemma. A suggested priority would be to find a way to remove the microphone and if possible to fit it into a parabolic reflector to minimize irrelevant sound. If you can't remove the mike,

perhaps you can isolate the causes of the most egregious operator-induced noises—the earring scratching the camcorder, your glasses, absent drumming with the fingers.

Although this is not a tract on the salvation of faltering marriages, we must now cover stability and companionship.

Stability is essential. The notion that you can hand-hold a camcorder and get a meaningful image of bird behavior is a fatuity—especially at higher magnifications. A unipod is perhaps better than nothing but is generally not adequate. Use a tripod. Use the top of your car. Wedge the thing into the fork of a tree, but don't bother to push the go button if the camcorder is not secured. The image will perform a maddening dance preventing any useful analysis or enjoyment. If you use a tripod, and that's certainly the preferred support, endure the extra weight of a stout one, lock it down in all axes, push go and take your hands off it. Footage of even a distant nest or feeding flock will likely yield some delights and insights, but only if the image is stable. Today's camcorders are light, and, lacking mass, they don't readily resist trembling.

Finally, you need a confederate. A quiet one, sensitive to communication by nod or nudge. Someone to see, hear, and alert you to the many things you're missing because you've suctioned your eyeball into a video viewfinder. A pal to make supplicative shushing gestures to the approaching child, the nice man with the screech-owl tape. Someone to tell you what the black-hawk really looked like.

MICHAEL GODFREY is producer of Audubon's *Up Close* series of ecological profiles of North American bird groups on video and Audubon's Videoguide to Birds.

TRAVEL: NEW DESTINATIONS IN A REDEFINED WORLD

by Jessica Cohen

FIFTEEN YEARS AGO, WHEN ASA Wright's cocoa and coffee plantation in Trinidad became unprofitable, she found she had a captive market as provider of birdwatchers' lodgings. She converted her house to a hostel for naturalists willing to forgo hotel finery for doorstep proximity to undisturbed wildlife. Such places were rare at that time, according to Victor Emanuel, who has run a birding tour company for 20 years. But now, he says, several areas of Central and South America are responding to the continued attention of wildlife devotees by providing more comfortable, clean quarters and—more crucially—by preserving the surround verdure. "Costa Rica, Venezuela, Ecuador, and Belize are seeing a boom in infrastructure development of new lodges."

This interplay between commerce and ecology resounds with ecotourism—commercial touring of natural preserves that benefits the host country, providing them with incentive to protect their resources. Fortunately, an unlimited energy source, human curiosity, fuels the cycle. Emanuel, who launched his touring business driving people in his own car from Texas to birding spots in Mexico, watched his business grow at 10–20% per year from 1975 on, expanding through South and Central America to Asia and Africa. He and other birding tour operators constantly monitor politi-



The Harpy Eagle (*Harpia harpyja*) is among the most powerful birds in the world. This species even has the power to draw birders to the Tropical Americas to view it!

cal as well as physical conditions in fecund areas around the world, seeking new realms for exploration.

While South and Central America have long offered favorite destinations for American birders, political changes, both for better and worse, seem to stoke activity in new areas. Costa Rica has been consistently popular for the last ten years, with its tourist and conservation-friendly government, and the possibility of recording over 500 species in an 18-day period there. But the appeal of Venezuela and

Ecuador rose with deterrents elsewhere; Colombia's drug-related violence and Peru's Shining Path terrorists drove birders to seek other rainforests, according to Will Russell, founder of Wings tours. However, these currently spurned areas, like Surinam, with its huge untouched forests, Harpy Eagles, and large macaws, and Cuba, will probably regain their audience once political obstruction and danger pass.

But meanwhile new regions in South America have fired the imagination of touring companies. Bret

Whitney, director and tour leader of Field Guides sees great potential in Brazil, even conceding expensive air fare to Rio, lack of field guides and Portuguese language. "It's chock full of rare endemic birds no one has seen, and you can get around by flying or driving. Hardly any birds are inaccessible, whereas in Peru and Ecuador there are all sorts people can't physically get to." Less than half of Brazil is Amazonian rainforest; there are a variety of other distinctive arid and wetland habitats. And threat of extinction is a great crowd draw: With all but 2% of the coastal lowland forest cut, several species have become very rare. The Red-billed Curassow, Three-toed Jacamar, and Black-hooded Antwren are nearly extinct, says Whitney.

But while that 2% of remaining forest in Brazil is in reserves, Nicaragua's rainforest—one of the largest undisturbed—may face the lumbering hatchet of the Taiwanese, according to Emanuel. He sees this area as another desirable target for ecotourism. It is a habitat for an unusual mix of birds, due to its unique geographical qualities, says Whitney. Typically South American species, like the Ocellated Poorwill and Wing-banded Antbird are seen northward only in Nicaragua. And because it contains the southernmost coniferous forests, some birds reach their southernmost limit of distribution there. And although the country is politically unstable, it is not dangerous. The task will be to develop local contacts, facilities, and itineraries.

Further afield, in Africa, Kenya, like the Galapagos Islands, is a favorite destination prone to wear and tear. "The parks have reached capacity, and they don't know what to do about it," says Christine Shepherd of the New York Zoological Society. And in addition to tourists' physical presence disturbing wildlife, she has

trepidations about their indulgence in resources: "I remember being in a lodge where there was enough firewood burning in a night to keep a local village going for a week and a half."

Madagascar may be an area with more growth potential. The secretive, terrestrial ground-rollers and mesites are two of five endemic families of birds there, and over 100 endemic species inhabit the area. Because of the high rate of endemism, says Russell, "What you see, you don't see anywhere else and in some cases, you don't see anything like them anywhere else." Exotic plants and lemurs that wail mornings and evenings enhance fascination. Yet a politically troubled and impoverished populace retards infrastructure development. There may be two-hour drives from lodgings to birding sites.

In contrast, South Africa is comfortable and streamlined, in addition to having numerous remarkable endemic plants as well as birds. But Russell says he abandoned tours there because the unhappiness of blacks oppressed by apartheid was so pervasive. He expects the area to regain popularity if the movement to dismantle racial inequalities progresses.

And another habitat for exotic avifauna, Papua New Guinea, could also become more popular, despite a primitive, "spooky" reputation, as people discover the increasingly attractive accommodations, says Whitney. All the birds of paradise, and an array of pigeons, parrots, and cuckoos live there. Plus, the locale has a new field guide.

But Emanuel is preparing for a surge of interest in the Orient. "It's the only major area where there are lots of birds that hasn't been frequented by Americans," he says. Competitive air fares, new lodges, and new guide books to Thailand



If you were a monkey on Mindanao, this might just be your last view of life—a Philippine Monkey-eating Eagle (*Pithecophaga jefferyi*).

and Eastern Indonesia should prompt interest. Emanuel is offering his first trip of Bhutan in 1992 and a new land-based tour to Indonesia—home of 1500 species, and the world's highest percentage of endemics—because of its improved accommodations. And in 1993 he plans a China tour.

Ben King, with his Kingbird tours specializing in Asia, has already seen the shift. For six years his spartan trips to the Tibetan Plateau averaged two-to-four people. Then two years ago they started to fill up

with ten, crude as accommodations still are. "One place we stay in Szechuan is like a third world jail. It's just a concrete shack with four walls, used for road repair crew," he says, although the Chinese "go all out" with food. Still, this year a 75-year-old man took the trip.

King believes the Tiananmen Square incident reminded people of China's political instability, that they should go while it's open. Fifteen years ago it was all closed; some of its 1220 species, including 25 species of pheasants, had not been

seen by Westerners for 50 years—like the spectacular red Temminck's Tragopan. King thinks the political situation could easily deteriorate, but as long as it is stable, China will be an increasingly popular birding destination. And with its wooded areas at only 16% of the world average, and diminishing, ecotourism is one of few conservation supports.

Taking advantage of changes in the USSR, King also made an exploration trip to Ussuriland, in south-eastern Siberia. He plans a 1993 tour there, conjecturing that that area's availability will survive the Russian turmoil. It may be particularly interesting to people who have seen vagrant Siberian birds, perhaps buntings, passing through Alaska, and want to see them *en masse* on their breeding grounds, says Whitney.

King is also one of the few tour operators with good local contacts in the Philippines, providing guides to their rapidly receding forests, with over 170 endemic species, including the gigantic endangered Monkey-eating Eagle. "Ecotourism is just about the only weapon we've got," he says, but concedes that it's just David against Goliath governments who are allied with the multi-billion-dollar lumber industry.

And he gets letters from rainforest action groups suggesting that he boycott such countries. "In conservation literature they print letters pro, con, and on the fence. Every one of them is right," he says. But like the other touring company founders, he believes, "The people that go there develop a constituency that conservationists can call on. Most people won't write letters to places they haven't been and don't know about."

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LYME DISEASE: PREVENTING THE PREVENTABLE

by Jo Ann Heltzel

Lyme Disease has already hurt birders and birding. Unless we become better educated, it will damage us and our birding pursuits in the future. —THE EDITORS

FOR THE LAST SEVERAL YEARS LYME disease has featured prominently in the news. We have all heard about the dangers of the disease; perhaps you even know someone who has had the characteristic bull's-eye rash and received an early diagnosis and treatment. Unfortunately, many people miss the early warning signs, developing chronic Lyme disease, which is difficult to both diagnose and treat.

But Lyme disease is a preventable illness. While there are no guarantees, understanding what to look for, what behaviors can increase or

diminish your risk of contracting Lyme disease, and making the appropriate adjustments in your activities will greatly increase your chances of prevention.

Lyme disease has been known in Europe for more than 100 years. However, it first appeared on the eastern shores of the United States in the middle 1940s. Apparently, infected deer ticks and Lyme disease spread inland from coastal towns along Long Island and Connecticut, transmitting the disease to several states in New England and the upper northcentral Midwest. By 1990, forty-eight states, excepting only Hawaii and Arizona, reported Lyme disease to varying degrees. The first reported United States case was in 1970 in Wisconsin. Today, Lyme disease is found on all continents except Antarctica, although incidence of the disease remains highest from Massachusetts to Pennsylvania, and in Wisconsin, Minnesota, and north central California.

As a birder, the hours you spend outdoors in fields and marshes can increase the likelihood of contracting Lyme disease. Many believe migrating birds play the major role in transporting infected deer ticks across great distances, especially as



American dog tick, adult female (left), and deer tick, nymph (right), in palm of hand with penny.