

## EIGHT



# MADE IN THE SHADE

GREG AND I PULLED INTO the gravel parking lot at Lantz Farm around two, and I suddenly remembered that I had a six-pack of beer in the cooler in the back of my Jeep. I'd bought it on my way to Jacksonburg the day before in the hopes that it would endear me to my hosts. I popped the tailgate and slid the top off the cooler; amazingly, a few cubes of ice still floated inside and the bottles were frosty. "I don't know if you drink beer, but I brought some," I said, pulling the six-pack out of the cooler.

Greg's face lit up. "I drink beer," he said, "but there's a rule that I strictly follow about not transporting alcohol in state vehicles, so there's not usually any out here."

"Well, I didn't come in a state vehicle," I shrugged.

"No, you didn't," he said, smiling, and we walked across the field to the barn.

The beer went in the refrigerator, and I finally went to the shower for a "warm mineral bath." I turned on the water, which was scalding hot and smelled strongly of sulfur. The cement around the bottom wall of the shower was stained orange. I hoped the local residents of Wetzel County didn't drink that water; I'm not sure what sulfur does to a body healthwise, but its smell and taste were highly unpleasant. It was wet, however, and I would have bathed in the pond out back if it meant rinsing several days of dried sweat from my body.

The faucet in the shower confused me, and as I stood under the spray, the water grew hotter and hotter. This sort of thing happens to me with surprising frequency—because I was too embarrassed to go back inside and ask how to work the

shower, I fumbled around, getting scalded, until I gave up and decided to suffer. I somehow managed to wash myself and my hair before my flesh burned off.

Back inside the barn, I heated a cup of miso soup in the microwave and sat down at the long folding table in the common area. Greg sat across from me, his banding bag open in front of him as he organized the equipment inside. Dr. Wood had told me that Greg had an interest in Latin America, and that I should ask him to talk about some of the problems ceruleans face on their wintering grounds.

“Well,” Greg began, “I’m concerned about the habitat in the tropics because ceruleans already live in relatively narrow bands down there.”

I sipped my soup slowly and folded one of my sore (but relatively clean) legs under me. “The habitat is in danger because of coffee production, right?”

“Yes,” Greg nodded. “Full-sun coffee is bad. As quickly as I can say that.”

As the demand for coffee rises, more and more small-scale, traditional farms are converted to full-sun plantations. According to the Coffee Research Institute, coffee plants (which are native to Ethiopia) were brought to the Americas for cultivation in the early 1720s. Until recently, in South America these coffee shrubs were grown in the shade of the primary forest’s canopy. In Colombia, Venezuela, Ecuador, Peru, and Bolivia, most Arabica coffee is grown on the slopes of the Andes Mountains at elevations of four thousand to six thousand feet—in the same approximate elevation range as wintering cerulean warblers and other Neotropical migratory birds. Biologists in Colombia estimate that at least 60 percent and perhaps more than 90 percent of the cerulean warbler’s original wintering habitat has been lost. Ceruleans are known to forage in the canopy’s tall trees that provide shade for coffee shrubs; if these trees are cleared to make way for full-sun coffee farms, the birds lose their winter homes.

In the last twenty-five years, many shade-grown coffee farms have been converted to full-sun because the coffee plants can be grown more quickly and produce more beans. But since the beans are not allowed to remain on the plant for as long a period of time, the result is weaker-tasting, less-acidic coffee. Besides the coffee’s flavor, the conversion to full-sun plantations has other detrimental effects. The Coffee Research Institute warns that on a full-sun farm “production is higher, but fertilizers, pesticides, and herbicides are often used.” In a heavy rainstorm these chemicals can be carried down mountain slopes to the rivers, streams, and towns below. Handling dangerous chemicals could also put the workers—often peasant farmers, or *campesinos*—at risk.

Fortunately, American consumers still have the option to purchase coffee grown and harvested using more responsible methods. Several certifications exist for coffee—organic, Fair-Trade, Equal Exchange, shade-grown, Bird Friendly, Rainforest Friendly, and others—and while the certifications differ, many coffees

are double- or triple-certified. In general, buying coffee with *any* certification is more socially and environmentally responsible than buying coffee without certification.

“As long as it’s certified by someone,” Greg said, “for the most part you can find out about who certified it and what their qualifications are on their webpages. There are folks who try to market shade-grown coffee that’s not necessarily certified, in which case you have to wonder, what’s it shaded by?”

“What do you mean—the coffee shrubs might be shaded by a big umbrella or something?” I asked.

Greg laughed. “It can actually be worse than an umbrella. The coffee can be shaded by eucalyptus trees, which are an introduced species. Eucalyptus grows very fast, which makes it a great second resource for farmers because they can cut the eucalyptus down and sell that, too, but the trees suck all the nutrients out of the soil because they grow so fast. And since they’re an introduced species, there are not a whole lot of insects that like to hang out on them. So they’re really not the best trees for birds. You could claim that coffee shaded by eucalyptus is ‘shade-grown,’ but is it part of a functioning system? No.

“There are other situations,” Greg continued, “where there are multiple layers of different sorts of marketable produce. Maybe coffee on the bottom, then papaya over that, and over that, bananas, and over that, some sort of tree species.” While this kind of agriculture is better than full-sun or eucalyptus, it still isn’t as desirable as primary forest. “But I think one of the biggest problems,” he said, “is that if you walked up to the average American and asked, ‘Have you ever heard of shade-grown coffee?’ they’d probably say, ‘No.’ So a lot of this comes down to education. If people don’t know about shade-grown coffee, they’re not going to buy it.”

I nodded and sipped my soup.

Greg leaned back in the folding metal chair and continued. “It also comes down to who’s responsible for this sort of thing. You have the coffee farmer, the person who’s marketing the coffee, and the person who’s consuming it. For the most part, in my opinion, the responsibility falls on the consumer. The farmers—they don’t have much of a choice. They’re poor, they’re doing the best they can to get by, and they don’t have the ability to make a whole lot of choices as far as what they can and cannot change. And then, to some degree, the marketing folks, they might have something to do with this, but the marketing folks are driven by what the consumers want. It all seems to fall on the consumers.”

“So,” I asked, wiping a drip of soup from my chin, “where do cerulean warblers fit in? Who cares?”

Greg smiled, then looked up at the plywood ceiling and thought for a moment. “Well, in the end, I think it’s our responsibility to do the best we can to maintain

what we already have. The interconnectedness of all these different species needs to be maintained. If we start dropping off species here and there, in the beginning it might not seem like much, but you got to kind of wonder where you hit a tipping point. Where you disrupt something.”

“It’s like Jenga,” I said.

“Totally,” Greg agreed, nodding. “You got to wonder how many of those blocks you can pull out...”

“Before the whole thing falls down,” I finished.

“Yep. Exactly. And with shade coffee, we’re working toward a balance between people, economics, and conservation. This species could show how we could pull in experts from different areas and make things better for everyone. I think it’s very possible to make habitat on the wintering ground—and on the migratory route for that matter—much more secure for ceruleans and, at the same time, make things better for the farmers who are working those lands. And, at the same time, also making folks on the breeding grounds happy by maintaining high population numbers. Potentially, then, the species would not have to be put on the endangered species list, and therefore would not affect thousands of people who are working in the mountains of Central Appalachia. I think it’s a win-win-win situation all the way around.” Greg smiled again. “It’s just a matter of getting the word out to folks about what’s going on and how easy it is for everyone to chip in a little bit. Buy shade-grown or ‘songbird’ coffees.”

Songbird coffees—widely available online and at many nature and garden stores—are usually certified as shade-grown and often organic or Fair-Trade as well. These coffees are marketed specifically to consumers who care about conserving migratory and wintering habitat for songbirds. The Wild Birds Unlimited franchise sells its own line of songbird coffee, as does the National Audubon Society. The Smithsonian Migratory Bird Center certifies coffees as Bird Friendly. The American Bird Conservancy, in cooperation with the American Birding Association and Fundación ProAves Colombia, offers twelve-ounce bags of Cerulean Warbler Conservation Coffee. Its bright-blue foil package sports a photograph of an equally bright-blue male cerulean warbler. The text on the back begins, “Let’s Save the Cerulean Warbler,” and goes on to explain the reasons for the bird’s shrinking Colombian habitat. The label promises that purchasing this coffee will help “ProAves Colombia protect bird habitat and the cultural heritage of the region, ensuring a warm winter welcome for the Cerulean Warbler.”

Colombia is famous throughout the world for its rich coffee; the image of Juan Valdez and his mule, “Conchita,” is familiar wherever coffee is consumed. It is perhaps less well-known that Colombia also harbors more bird species than any other country in the world; it boasts a total of more than 1,800 resident and migratory

species, including many Neotropical birds that spend the winter in Colombia's varied habitats. In addition to the cerulean, Colombia's Andean *intermontane* region shelters wintering Canada warblers, Blackburnian warblers, rose-breasted grosbeaks, black-and-white warblers, summer tanagers, and a host of others. In 2002, the conservation organization ProAves Colombia established the Cerulean Warbler Bird Reserve in Colombia's Santander province; the Reserve is surrounded by shade-grown coffee farms. The ceruleans we'd banded earlier linked me, Greg, the state of West Virginia, and indeed the entire Appalachian Bird Conservation Region with those coffee farmers on the slopes of the Andes in Colombia.

I finished my miso soup, tore open a granola bar for dessert, and Greg and I went out the back door of the barn to watch the ponds. The beer chilling in the refrigerator tempted us, but we decided to be polite and wait for the others to get back from the field before drinking it. We sat on the back stairs of the barn and watched barn swallows skim the surface of the brown water. I heard a trilling bird-song that began slowly but gained speed. "Field sparrow?" I ventured.

Greg shook his head. "No, prairie warbler."

"Hmm," I mumbled. I hated to be wrong about birdsongs (if I indeed had been wrong!).

We watched an orchard oriole working on a basket nest in a small maple tree along the pond. Soft-shell turtles poked their noses out of the water while a white-eyed vireo's strange notes burbled from thick shrubs across the field. The exhaustion that I'd forgotten about returned suddenly, and I went back to my room to "read." I woke up a few hours later when Patrick and Aaron returned to the barn. They'd left Randy on Snake Ridge because he'd wanted to continue searching for nests. Patrick would pick him up at seven—after Randy had spent a total of thirteen straight volunteer hours in the field. Aaron had to drive back to Morgantown that night for West Virginia University's graduation, so he left shortly after returning to the barn.

By 7:30 or so, Greg, Randy, Patrick, and I were seated around the barn's folding table, happily sipping pale ale and talking about cerulean warblers. Randy had found three cerulean nests and a score of other birds' nests, as well. Patrick imitated an agitated male cerulean warbler, flapping his arms stiffly while saying, "You wanna piece of this?" Halfway through my beer I began to giggle, and by 8:30 we all decided to call it a night. I lay down on my narrow bed, still exhausted despite my nap.

I opened my eyes just before my alarm was set to go off at 5:00 a.m. I stretched out and yawned. My arms and legs were sore, but it was a good, healthy sore. I blinked a few times and realized that I'd heard no frogs and no trains all night long. I hadn't thrashed around in bed or checked my watch. I swung my legs over the side of the small bed, turned on the light, and began to quietly stuff dirty laundry



A banded cerulean.

into my bags. I would accompany Greg and the others into the field this morning, but I would leave my Jeep at the entrance to the Wildlife Management Area. After a few hours of banding, I planned to walk back down the steep road to my Jeep and head back to Virginia.

I ate a breakfast bar, swigged some warm spring water from my jug, and loaded up my gear. I followed the other vehicles, parked my Jeep by the gate, and then rode in the Blazer that Greg drove. The other folks followed in their government Jeep, but then they parked it along the road and all piled in the Blazer. The day before, as Greg and I had walked down the incredibly steep hill after our morning of banding, a pickup truck had rumbled up past us—so much for not being allowed to drive, Greg figured, so today we would ride all the way to the top of Snake Ridge. It felt a bit like climbing a hill on a roller coaster, and at times I couldn't see over the Blazer's white hood because of the steep angle.

When we finally reached the top, we all got out, and like the day before, the others prepared to head off to search for nests while Greg and I would band. I said my good-byes to Randy and Patrick, and Greg and I went off to find the mist-net poles that we'd hidden by the fallen tree. Well-rested, alert, and generally more confident, I marched through the woods behind Greg with a smile on my face and a buzzy cerulean song in my heart.

AFTER A FEW HOURS IN the field, I strode back down the steep logging road, talking to myself and listening to the birds all around me—black-and-white warbler, scarlet tanager, ovenbird, and the ubiquitous red-eyed vireo. The woods smelled of warm, dry leaves, and wild geraniums grew along the road. Greg and I had banded two male ceruleans that morning before it was time for me to leave, for a total of six ceruleans during my visit—BBL numbers 53621, 22, 23, 24, 25, and 26. Each had a red band over a silver band on the right leg and various color combinations on the left.

I smiled at the trees and the unseen birds, and the happiness that had filled me at Cooper's Rock crept slowly back. My legs ached, my hair smelled like sulfur, and I had a four-hour drive ahead of me, but at that moment, I was the only human in sight. The birds and trees outnumbered the people. The handful of humans who *were* up here on this ridge loved cerulean warblers, even if they weren't allowed to say that for fear they'd be risking their scientific objectivity. But love was obvious in the gentle way that Greg handled the delicate birds while banding them, and in Randy's smile when he described the sit-and-spin and the whisper song.

The peace of the forest was abruptly cut short, however, by the buzzing of a small engine somewhere ahead of me and off the road to the right. It became louder and louder, and finally a four-wheeled all-terrain vehicle rumbled out from a side trail and stopped on the rocky road just ahead of me. The driver was a thin, elderly man wearing a red-and-white flannel shirt and jeans despite the heat. The ATV had what appeared to be a homemade roof—sort of a blue tarp tied to a frame.

"Goin' down to the gate?" the man asked over the rumble of the engine. "Wanna ride?" He slid forward on the seat to make room for me. I noticed a small black poodle-like dog strapped to the seat behind him. The dog wagged his tail and wiggled as I got closer. Anyone who took his poodle for rides on his ATV had to be alright.

"Sure," I said, swinging my leg over the seat. "Thanks." The little dog squirmed behind me and proceeded to lick my ears as we started down the hill. I peeked over the man's shoulder and noticed how gnarled and wrinkled his fingers were as he gripped the handlebars. His brown leather work boots were crusted with mud, and the back rim of his black baseball cap was ringed with dried sweat. He spoke over his shoulder to me, but because of the rumble of the engine and his thick accent, I couldn't understand much of what he said.

"The boys are putting in pipes," I think he told me as we passed an idle construction vehicle parked alongside the dirt road. He cackled and steered around a large rock. I think he continued to tell me about the pipes, but I said very little other than an occasional "Oh?" or "Yeah?" I had no idea what he was talking about.

"Is my buddy giving you enough room?" he shouted over his shoulder, and laughed again.

“Yep,” I said, “I’m fine.”

“You looking for birds?”

“I am,” I told him.

“Got lots of birds here,” he said, “lots of rattlesnakes, too. I got lots of birds at my feeders. I got this one bird who comes, he has a red ring around his neck and a red spot on his head.”

“I’m looking for cerulean warblers,” I said, leaning to one side so he could hear me better. “Little blue birds with white chests.”

“Oh yeah, I got lots of those blue birds at my feeders, lots of them,” he nodded.

“Yeah,” I said, though I knew he was probably referring to blue jays or maybe indigo buntings. Since cerulean warblers eat almost exclusively insects, they have no reason to visit bird feeders. I didn’t think it would be possible to explain that over the growl of the engine, so I didn’t try.

When we reached the gate and my Jeep, the man slowed the ATV to a stop but left the engine running. He spryly hopped off and turned to help me. As I swung my leg over the seat, a second ATV rumbled out of the woods and pulled up next to us. Its driver, a burly, flannel-shirted man with a thick brown beard, nodded at the old man and then said to me, sternly, “If you’re walking around up there, you better watch out for them rattlesnakes.”

I assured him that I would, and that I hadn’t seen any. I noticed that the man’s left eye was squinted slightly and ringed with a deep, purple bruise. I wondered what the other guy looked like.

“Rattlesnakes sure are pretty,” said the elderly man, smiling and winking at me, “but deadly. Last summer I killed one seventy-two inches long.”

I decided not to try to persuade him to allow rattlesnakes to live, and as the two men began to discuss the progress on the mysterious pipes, I said good-bye to the black poodle on the seat of the ATV. He wiggled and wagged his tail and stood up on his hind legs to lick my face. When the old man noticed, he turned to us and laughed. I thanked him, and as I began to walk to my Jeep, he called after me, “If you ever need a ride up or out of these mountains again, just holler for me and my buddy!”

I waved and pulled onto the road. As I left the Lewis Wetzel Wildlife Management Area behind me, I smiled. There were still a lot of decent people in the world—people who cared about the poverty of other people half a world away. People who volunteered long hours because they enjoy what they do. People who, out of simple kindness, offered rides out of steep places. People still loved their dogs and their bird feeders, and worried about strangers stepping on rattlesnakes.