BIODIVERSITY DAY

by Marjorie W. Rines

What was percolating in Peter Alden's mind when he decided to organize "Biodiversity Day?" He had only recently completed a series of books covering the plants and animals of various regions of the country, and had consulted with experts in many disciplines to do this. Perhaps it was an epiphany — the discovery of the joy inherent in the universe. Or perhaps it was Peter's natural propensity to organize things.

The problem is, Peter never goes about these things in a halfhearted way, and it mushroomed into an event that must have taxed even his boundless energy. The day arrived, July 4, 1998, the anniversary of the day that Thoreau moved into his Walden Pond home and, not just coincidentally, the only day E. O. Wilson could attend the gathering. E. O. Wilson may have been the best known of the participants, but many of the other experts who gathered in Concord were no less skilled in their fields.

Spiders and sedges, sparrows and spruces, salamanders and slime molds: there was an expert on almost every living thing. And the goal was to exceed 1,000 living things in Concord and Lincoln on Independence Day.

I participated as a "bird expert," probably the only one who couldn't boast expertise in some other field as well. When the alarm went off at 4:00 a.m., I was ready to go, car loaded with field guides, and at 4:30 a.m. I was standing at the edge of a wooded area in Lincoln, imitating a screech-owl. It was dark, the owls weren't buying it, and I felt like an idiot. I tried a few other places, but no luck.

By now the songbirds were getting cranked up, so I headed to a thicket I had staked out to look for Least Flycatchers. I'd heard them the week before, and this species isn't common in the area, so I was pleased when I heard them che-becking in the distance. A tom Wild Turkey gobbled, and a Blue-winged Warbler bee-buzzed. I checked off a few more species, then headed to Hanscom Field to meet Bob Stymeist and Ted Raymond at 6:00 a.m.

Hanscom is a military airfield that is a breeding ground for a number of grassland species. Access to the field is usually limited to peering through the chain-link fence that surrounds it, but for this occasion we had received special permission to enter the airfield itself. The airport official handed us a two-way radio to alert us in case of air traffic headed our way (a somewhat disconcerting idea), and then drove us onto the runways toward the grassy areas where the birds breed, and dropped us off.

Walking along the edge of the uncut grass, we watched Upland Sandpipers skitter off the runway, hovering with their shallow wingbeats, hooting their "wolf-whistle" songs. Savannah Sparrows, Eastern Meadowlarks, and Bobolinks

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sang. Finally, a tiny sound reached our ears, and we watched a Grasshopper Sparrow, teed up on a spear of grass, vibrating as it belted our its ear-stretching song.

Bob had to leave at that point, but Ted and I continued on. On a hill overlooking Hanscom, we could hear a chorus of songbirds. An Indigo Bunting sang, and then flew to the top of a tower beside us so we could admire both his song and his still-immaculate plumage. Walking down the hill, we startled an American Woodcock from a wet area, and flushed a family of Ruffed Grouse from a thicket. Tiny golden butterflies fluttered by, which we identified with confidence as . . . skippers. There are lots of yellow skippers, but they are frustratingly difficult to identify. We studied their field marks, but when we consulted the field guide back in the car, they remained "skipper species."

Thoreau's birthplace was next, more in celebration of the day than in search of new species, but an Eastern Bluebird sang for us, and an attractive moth landed on Ted's fern field guide. It seemed happy there, so Ted carried it to the car and laid the book gently on the floor, for identification later by someone who knew what they were doing. On to Estabrook Woods, where we tallied a variety of woodland bird species. As we ambled along, we also examined dragonflies, plants, and mushrooms. Ted had a little knowledge of each of these, and we tentatively identified as many as we could. We collected a number of the mushrooms, including a fine specimen carrying a slug as cargo.

We also got lost. We were wandering south on a lightly wooded path trying to find our way back to the car, when a large, hairy black mammal lumbered off the path into the adjacent bushes. "Ted, it's a bear!" I yelled before I realized what a preposterous statement that was. Everyone knows there are no bears in Concord. We searched the area, but it had disappeared into the bushes by the side of the path. Ted had missed it, and tried to talk me into any variety of alternate species, from coyote to mirage. Later, we found out that bears had, indeed, been seen in Concord, and we added it later to our otherwise-paltry mammal list.

We finally relocated the car, and were feeling virtuously biodiverse as we stowed the mushrooms (and the slug) into a bag on the back seat of the car.

At noon in Concord, participants were gathering at the home of John Stevens and Virginia McIntyre to compare notes. Both the moth and the slug had disappeared from their original locations in the car, and could not be relocated, despite careful searching. We gave up and carried our bag of fungal trophies inside to find the mushroom expert.

We were greeted by an onslaught of excited voices exchanging highlights of their explorations. Most of the species being named were incomprehensible, and gave me new appreciation of a nonbirder's feelings when plunged into a group of enthusiastic birders. We joined in the cacophony, accosting others to hear of their discoveries, and telling of our own. Our bag of mushrooms was our only show-and-tell (too bad the slug disappeared), and we handed them over to Noble Proctor, an ornithologist from Connecticut who is also an expert on fungi. He put a name to each one, and somehow made us feel as if each of these were important, although I am sure none of our discoveries were unique. One item we had collected was a web of black, with golden beads suspended throughout it, discovered hanging from a rotten stump. It was a slime mold (*Leocarpus fragile*), and I was delighted that such an unpleasant name could describe such a lovely living thing.

People loitered over lunch. The company was too good, and the conversation too interesting, to rush off to find more. Birder and newly converted entomologist Vern Laux had decided to experiment in an entirely new field, and spent the morning up to his neck in water, helping Karsten Hartel find and identify fish. Suffering obvious butterfly withdrawal, he gravitated to the field below and started calling out species to whoever would listen. Soon a dozen people were wandering about, looking for great-spangled fritillaries and more of those damn skippers.

Ted and I finally decided we'd better go out and at least try to find a gull for the day; so we headed to Great Meadows. We watched painted turtles, bullfrogs, green frogs, and a mysterious dark snake that poked its head out of the weeds. It didn't matter that we couldn't name the snake; enough that it was there and we saw it. But our task was birds: Wood Duck, Great Blue Heron, and (finally) a Ring-billed Gull were new for the day. An American Coot was out of season, but an atrophied leg suggested that its presence wasn't voluntary. In the nearby sewer treatment plant we discovered Least and Spotted sandpipers.

At 4:00 p.m. we were birded out, and Ted reluctantly returned home to family obligations. I went home, showered and changed, and headed to Lincoln again for dinner at Winty and Andrea Harrington's. I took a couple of detours en route, hoping to find a Rock Dove, which we had missed for the day. I looked for appropriate habitat, but couldn't locate any dumpsters or road overpasses.

Climbing out of my car at the Harrington home, the first thing I heard was a loud "Hey bluebirds, come and get it," followed by a series of whoops. I followed the sound, and found Winty with a group of people watching a fencepost right in front of the house. Another set of whoops brought a bluebird into a tree above the post. It flew down, picked something up, and flew off. Meal worms. They loved them. So, evidently, did many of the other birds in the area, which recognized the invitation to the bluebirds and took the opportunity to gatecrash the party.

People continued to arrive; folks mingled, ate, and compared notes again. It grew darker, fireflies glimmered at the edge of the woods, and mosquitoes joined the feast. After dessert Peter called the group to attention, and asked for reports from participants in various specialties. E. O. Wilson started. He had identified thirty-six species of ants, including two species new to science. His enthusiasm was infectious as he described his excitement about Peter's project.

"The identification of species, group after group, is good science again. It's badly needed that we map the world of biodiversity, because that's the only way we're going to save it. If we don't know what it is and where it is, everywhere in the world, then you can't save it... You can make a kind of sport out of it and a



E. O. Wilson checks out an ant.

communal activity - a gathering of experts to put knowledge together, mosaic-like — a piece here and a piece there. It fits together, and suddenly there is a big picture emerging that you can only get with this kind of expertise . . . It's just the tip of the iceberg, these larger organisms. If you will pick up one pinch of soil — one gram of soil from those woods - you

will have in your hand ten billion bacteria, representing four to five thousand species, virtually all unknown to science."

Others were called to report on the number of species discovered in each of their fields of expertise. One group, comprising Noble Proctor, Wayne Petersen, Betty Anderson, and Dotsy Long, boasted an impressive concentration of plant and animal expertise and tallied over 850 species.

A man introduced as "the spider guy" had been attending the spider congress in Chicago that morning (along with all the spider experts in the country), but had promised to get back in time to add spiders to the list of wildlife. He was scheduled to arrive at Logan Airport by 3:00 p.m., but encountered mechanical failures, delaying his arrival by a couple of hours. Despite that, he managed to spend an hour and a half in the field and identified twenty-five species of spiders from six or seven families.

When Dick Walton was asked to report on butterflies and dragonflies, he declined to give a total, but instead spoke of the pleasure of spending the day with Jay Shetterly (tiger beetles) and his young daughter, Daisy. "These kids are fantastic learners — they are sponges — and we have to just motivate them . . . There's a story about a daisy. John Bartram, one of the important naturalists in our history, started out as a farmer, and one day he was plowing a field, and stopped, put down his plow, and literally sat by the side of the field and picked up a single daisy. He started taking that daisy apart, and from that one moment it

really changed his life, and it changed the history of natural history in North America. We need to encourage other people to pick up a daisy and look at it."

Finally, Peter stood up again to announce the total species for the day. The total, from a preliminary count, was 1620. A new Guinness World Record. But then, no one had ever done this before. Wait 'till next year.

Afterword

Well, I never did find that slug. But the following weekend was the annual butterfly census, and despite being a total neophyte, I decided to tag along and see whether I could learn something. The following week I spent time poking around places near home to discover more butterflies, and even identified several species of skipper. I started paying more attention to the dragonflies, and looking under rotten stumps for slime molds. I want to put a name to each living thing I see, but I realize that's too much to bite off, so I've settled for learning butterflies, at least for now. Is this new interest because of Biodiversity Day — or is it because I was ready to start exploring something new? Interesting question.

Marjorie W. Rines is the president of *Bird Observer*, and is rapidly becoming a convert to searching for butterflies. Wayne Petersen, Jay Shetterly, and Bob Stymeist, who also participated in Biodiversity Day, are also members of *Bird Observer*'s staff.

Note: Quotations from E. O. Wilson and Dick Walton were transcribed from a videotape loaned to the author by Peter Alden. The final total for Biodiversity Day was 1904 species (including the bear).

