the principal solution to the loss of diversity is to encourage local seed saving and privilege farmers' rights to develop locally adaptable crop varieties. Currently, she argues, those efforts are stymied by companies that market only a few crop varieties, and by the widespread practice of patenting seed genomes.

Cummings's background in environmental law and journalism serves her well as she acquaints readers with the contours of the seed debates. But her activist bent is evident in her reduction of the issues to a two-dimensional standoff, and her slim bibliography in some cases simply refers readers to the general websites of groups such as "Organic Consumers Association" and "Genetic Resources Action International."

Cummings's biases are clear when, for example, she attacks Monsanto—one of the largest distributors of GMO seeds and a company often criticized for aggressively filing lawsuits against farmers it suspects of violating its seed patents—for monopolizing agribusiness. She bases her case primarily on the stories of a few farmers Monsanto sued, and on information provided by the Center for Food Safety, a nonprofit organization dedicated to "challenging harmful food production technologies and promoting sustainable alternatives."

One of the strangest omissions in *Uncertain Peril* is any mention of Norman Borlaug, the Nobel Peace Prize–winning agronomist who introduced a high-yield wheat in the 1960s that was the forerunner of today's more sophisticated biotech crops. Borlaug remains an iconic figure for GMO advocates (Monsanto recently donated $5 million to the Borlaug-founded World Food Prize for its "Borlaug Dialogue" program on global food security). He believed that better agricultural technology could help feed earth's growing population, an argument that remains a cornerstone of agricultural biotech's defense. Whatever Cummings thinks of his ideas, a thorough discussion of GMOs cannot leave them unaddressed.

After running through industrial agriculture's dystopian fields, Cummings arrives at the hopeful paradise of GMO-free organic farming. She proposes promoting sustainable agriculture by renouncing our domination of nature and returning to the "cooperative reciprocal relationship" of pre-agribusiness days. Yet she poses a false choice between relying on the judgment of the "techno-elites" and using "our common sense and moral compass" to guide public policy. Yes, "stories can mend our broken world," but only if they aspire to persuade—not drown out—opponents. Until scientists can engineer a second planet, biotechnology specialists and organic farmers must find a way to coexist on this one.

Flora Lindsay-Herrera is a former researcher at *The Wilson Quarterly*.

# Fowl Sport

*Reviewed by Mark Jerome Walters*

**OF A FEATHER:** A Brief History of American Birding.
*By Scott Weidensaul. Harcourt. 358 pp. $25*

Like most good histories, Scott Weidensaul's fascinating account of birding in America dispels many myths. While most histories of American ornithology begin with the early-19th-century luminaries Alexander Wilson and John James Audubon, Weidensaul points out that birding on this continent was pioneered by "field ornithologists" who were here long before: "the Indians, of course, whose knowledge of birdlife was based on deep association, long observation, and at times lifesaving necessity."

Weidensaul also challenges often-cited federal estimates that there are between 46 million and 68 million U.S. birders—a term that, loosely construed, describes even people who hang a bird feeder on the porch. Only about six million people can identify more than 20 bird species, according to the U.S. Fish and Wildlife Service; the rest hardly deserve the badge of a true "birder." However birding is defined, it is one of the fastest-growing outdoor activities in the United States. It's an inexpensive pursuit for retirees and appeals to the growing number of people interested in the environment.

Weidensaul patiently and methodically sketches the scientific and artistic contributions of the most famous early birders, including Mark Catesby,

William Bartram, and John James Audubon, as well as many less known figures. Woven into this history are interesting subplots, such as the evolution of field guides from crude identification tools into the colorful and comprehensive identification books (and other media) of today.

Weidensaul saves some of his most entertaining writing for his descriptions of modern birders, who can be highly competitive and yet rely on the honor system as they race to list the species they have seen. At the World Series of birding, in the unexpected state of New Jersey, contestants sprint "from hot spot to hot spot, careening around the state like pinballs. . . . Participants have kept on birding despite hurricane-force winds, flat tires, sleep deprivation, serious traffic accidents, and virulent food poisoning."

The hunt had a darker side in days past: the deadly competition for specimens of vanishing species. The Carolina parakeet and ivory-billed woodpeckers were both highly imperiled by the 1890s. "The rarer they became, the greater the frenzy to get them for museum collections," Weidensaul writes. "Roughly 660 parakeets from Florida were shot and stuffed for collections in the last two decades of the 19th century." And what collectors could not get themselves, they paid for. From 1892 through 1894, one collector and his workers killed 44 ivory-billed woodpeckers in Florida (a significant body count for a fading species), and are said to have wiped out the bird entirely along the Suwannee River, where it was once common.

Weidensaul's glimpses into what modern technology has made possible for the sport are exhilarating. An iPod can store "a continent's worth of birdsong," a handy tool in the field. If you're a birder with a cell phone, "you can find a rare bird, 'phonescope' it by holding your cell phone's camera to a spotting scope, [and] send the image instantly to a friend who will post the photo on the Internet, so that in minutes birders in every corner of the world can know about your discovery." In the future, computerized binoculars may "scan the image of a distant raptor and offer an identification. And if we're not quite there yet, no one will be surprised when such a gizmo hits the market, probably week after next."

Whatever the future of birding, Weidensaul suggests that these magnificent creatures—winged presences for so long in our daily lives and our psyches—must be protected if they are to delight succeeding generations of birders.

Mark Jerome Walters is a veterinarian and an associate professor of journalism and media studies at the University of South Florida, St. Petersburg. He is the author of *Seeking the Sacred Raven: Politics and Extinction on a Hawaiian Island* (2006), among other books.

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