# ABOUT BOOKS

## Diversity Is the Spice of Life

*Mark Lynch*

*The Future of Life*. 2002. Edward O. Wilson. New York, New York: Alfred A. Knopf. 230 pages.

*Extinct Birds* (revised edition). 2001. Errol Fuller. Ithaca, New York: Comstock Publishing Associates. 398 pages.

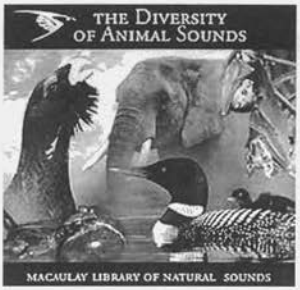
*A Gap in Nature: Discovering the World's Extinct Animals*. 2001. Tim Flannery and Peter Scouten. New York, New York: Atlantic Monthly Press. 184 pages.

*The Diversity of Animal Sounds* (CD). 2001. Jack W. Bradbury and Gregory F. Budney, producers. Ithaca, New York: Cornell Laboratory of Ornithology and the Macaulay Library of Natural Sounds.

I was a geeky grade schooler when I was given a marvelous book for Christmas that would change my view of the natural world forever. This special book was *The Wonders of Life on Earth*, by the editors of Life Magazine. It was the perfect children's introduction to evolution, migration, mating behavior, and even symbiosis. Although the pages were filled with color photographs, what really captured my imagination was the richly detailed artwork. Some of the paintings were even three-page foldout dioramas printed on both sides. These marvelous illustrations were by Walter Linsenmaier, Rudolf Freund, Joseph Sibal, and Guy Tudor. Here were the dark interiors of Brazilian and New Guinean rainforests, the sprawling Argentinian pampas, and African savannas. In every case, the pictures were crammed with life, swarming with insects, teeming with mammals and flocks of birds of every description. There were so many creatures in every painting that they looked like they were being pushed off the pages and onto your lap. I knew that if I ever finally got to these exotic destinations, this is what I would really see: life in myriad marvelous shapes and colors everywhere. I was too young at that point to understand that these dioramas did not represent the actual places, but idealized paintings that included far too many birds, animals, and insects than you would ever really see in one place at one time. But it was too late. I was hooked on biodiversity.

As I grew older and my knowledge of zoology and botany became more sophisticated. I realized that a world of interesting creatures and plants existed in any local yard or sandlot, and my passion for biodiversity grew even deeper. But I still yearned to see some of those fantastic animals I saw in *The Wonders of Life on Earth*, and so I traveled. When I finally did get to see those howler monkeys and Birds of Paradise, I instantly reflected back on the paintings in the book, because those images are forever burned into my memory. But it is interesting that in every case the paintings could not hold a candle to the experience of standing in front of the real thing: to hear the birds, to feel the dampness of the forest, to smell the vegetation, to

watch the mammal behave. The full appreciation of our planet's biodiversity is truly a multisensory experience.




A unique auditory celebration of this wonder of biodiversity is the CD *The Diversity of Animal Sounds,* produced by the Cornell Laboratory of Ornithology and the Macaulay Library of Natural Sounds. Although Cornell's Macaulay Library is best known to birders as housing a vast collection of bird songs and calls, in recent years the collection has expanded to include all sound produced by vertebrates and invertebrates. This stunning CD was originally given as a gift to participants at the American Ornithologists' Union meeting at Cornell in 1999. Soon, Cornell was flooded with requests for more copies of the CD, and they decided to release it to the public.

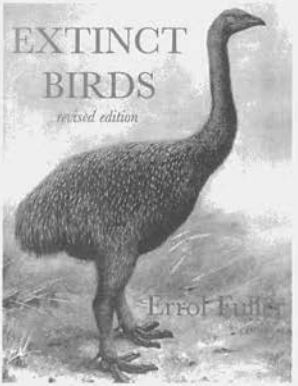
This CD can best be described as the "greatest hits" of the natural world, a compilation of 60 of the most amazing and bizarre sounds that invertebrates and vertebrates can produce, chosen from among the Library's 150,000 recordings. The sounds are grouped by their behavioral significance under such titles such as "display signals of promiscuous males," "territorial and courtship signals in polygynous species," and "group defense and coordination signals." A 26-page booklet included gives an overview analysis of these behaviors as well as all the particulars of the recordings. Birds, of course, are well represented, featuring the calls, songs, and displays of such species as the Satin Bowerbird, Superb Lyrebird, Bearded Manakin, Common Potoo, Great Blue Turaco, and Sage Grouse, as well as more local species like Winter Wren and Common Raven.

But I have to confess it was the nonbird calls that truly captured my imagination. The mournful trumpeting of a group of the huge, rare lemur, the indri, seems to herald their impending extinction in Madagascar. A school of chorusing male plainfin midshipman fish attempting to find mates in Tomales Bay, California, loudly drone just like Tibetan monks. This sound was so unexpected that when I first heard it I thought my CD player was broken. Even more amazing is the drumming of tiny treehopper insects made by rapidly vibrating their abdomens. These sounds were only recently discovered and are normally inaudible to humans. Rounding out all this exotic hoopla are state of the art recordings of sounds more familiar to all of us, like the tail-slapping of a beaver or the wail of a Common Loon.

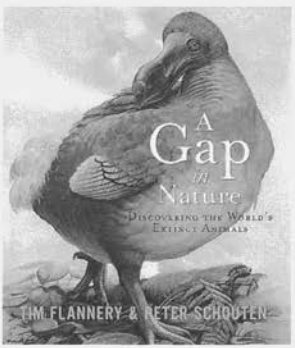
The last two cuts of the CD are calls and sounds made by two now-extinct species, the Ivory-billed Woodpecker and the Kauai Oo. Although I have seen many pictures, mounted specimens, and even photographs of extinct birds, there is something particularly poignant about hearing the voices of these forever lost species. The loss of earth's biodiversity also means, among other things, an awful stilling of the rich and varied voices of the natural world.

Examples of what has already been lost of Earth's biosphere be found in two very good new books about extinction: *Extinct Birds* and *A Gap in Nature. Extinct Birds* is

a dramatically revised edition of Fuller's 1987 classic published by Facts on File. The book has been expanded by almost 150 pages, with many more plates added and text sections reedited and rewritten. Even the back cover's collection of Dodo pictures has been expanded. It is truly a sumptuous volume on what is really a very depressing subject. Fuller, a painter as well as a writer, has an artist's eye for choosing fine art and interesting illustrations. The writing remains extremely informative and fairly definitive.

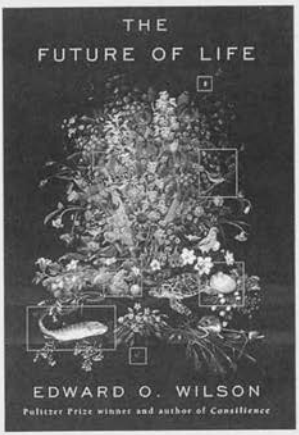



*A Gap in Nature* is more of a collection of paintings done by wildlife artist Peter Schouten, illustrating extinct birds, mammals, and reptiles, with concise descriptive passages written by Tim Flannery. Flannery has also written a good overview of the history of extinction that introduces the book. Flannery and Schouten narrowed their choice of subjects by only picking animals that have become extinct between 1500 and 1999. Their subjects also had to be known from sufficient material to allow an accurate illustration to be made. The book thus reads chronologically from 1500 and Upland Moa to 1989 and Atitlan Grebe. Schouten's paintings are consistently bright, bold, and lively, and create a real sense of loss for not being able to see these creatures in the flesh.




Why do we find such depressing books so fascinating? Are these the equivalent of gawking at a car wreck? Absolutely not! I believe it is vitally important to always remember what has been lost of the natural world. Furthermore, every story of extinction is an environmental lesson that needs to be learned anew. While reading accounts of extinction, I do often find myself feeling an odd mixture of fascination with the exotic combined with a deep and wistful longing for what once was and will never be again. After all, a hundred paintings, drawings, plates, and even animation cannot bring the Great Auk back to life. Perhaps we even get a sense of our own folly and mortality by reading these tales of doomed creatures; and knowledge of what has become extinct can foster a deep love and appreciation for what still remains around us.

To understand this human love of the complexity of the living world so many of us feel, and the biological mechanics of the biosphere, one has to turn to the books of Harvard entomologist Edward O. Wilson. To date, no other author has so clearly and passionately written about the meaning and future of the biosphere and our feeling of "biophilia," the seemingly innate love humans feel for the rich diversity of nature (Wilson 1984). His new book, *The Future of Life*, is both a concise summary of the challenges facing the preservation of Earth's biodiversity and a plan for how to go about this Herculean task. I cannot overstate the importance of this slim book.




Dr. Wilson begins *The Future of Life* with a brief but animated discussion of the breadth and variety of organisms that make up this very thin shell of life, or "biospheric membrane," that exists on our planet. "From Everest's peak to the floor of the Mariana's trench, creatures of one kind or another inhabit virtually every square inch of the planetary surface" (p. 3). But this unique living marvel is under an unprecedented onslaught caused directly by humans: "The twentieth century was a time of exponential scientific and technical advance, the freeing of the arts by an exuberant modernism, and the spread of democracy and human rights throughout the world. It was also a dark and savage age of world wars, genocide, and totalitarian ideologies that came dangerously close to global domination. While preoccupied with all this tumult, humanity managed collaterally to decimate the natural environment and draw down the nonrenewable natural resources of the planet with cheerful abandon" (p. 22).

We are at a crossroads now. Dr. Wilson uses the analogy of a bottleneck, where the growing human population has stretched the use of the natural resources to the limit, and we are teetering on an unprecedented collapse of the biosphere. What makes this book so useful is the straightforward, but passionate way in which Dr. Wilson makes his case. He clearly outlines what is at stake and why the biosphere is important both financially, and even more importantly, morally, aesthetically, and even spiritually. He clearly delineates the scope of this daunting problem and how we got to this chaotic point. Finally, he proposes several clear strategies for passing through the bottleneck to a world where we have both elevated the living standard of the world's desperately poor and preserved a significant part of what variety of life is left. He is no starry-eyed idealist and knows the problems will require international will and cooperation to solve, yet he remains cautiously optimistic that we will do the right thing. Dr. Wilson also believes that old-style politics has no place in this discussion and that sides have to cease to stereotype opposing camps in order to move toward solutions together.

I have to admit I am not as optimistic as Dr. Wilson even after reading this book. The problems seem far too complex, too far along, and require an international will to change I am not sure humanity can muster at this point in time. But then again, I have always been a bit of a pessimist and even a misanthrope. So, it surprised me that I found hope in Dr. Wilson's faith that we *Homo sapiens* will eventually solve this crisis. This firm belief in the eventual goodness of humanity as well as Dr. Wilson's genuine deep love of the diversity of life makes *The Future of Life* touching as well as informative.

> A civilization able to envision God and to embark on the colonization of space will surely find the way to save the integrity of this planet and the magnificent life it harbors (p. 189).

## References

Barnett, L. and the editors of Life Magazine. 1960. *The Wonders of Life on Earth*. New York, New York: Golden Press.

Fuller, E. 1987. *Extinct Birds*. New York: Facts On File.

Wilson, E.O. 1984. *Biophilia*. Cambridge, Massachusetts: Harvard University Press.

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## News from MassWildlife

### Salisbury Salt Marsh Wildlife Management Area

On October 25, 2001, Environmental Affairs Secretary Bob Durand dedicated the 325-acre Salisbury Salt Marsh Wildlife Management Area, the newest addition to MassWildlife's 120,000-acre network of statewide conservation lands. The area includes 306 acres purchased from National Grid using funds generated from the Wildlands Conservation Stamp, a $5 assessment on each hunting and fishing license used expressly for the protection of open space. Reimbursement from the US Fish and Wildlife Service's National Coastal Wetlands Conservation Grant Program was vital to the acquisition, as was the donation of 15 acres by Essex County Greenbelt and 5 acres by the Essex County Sportsmen's Association. There are 265 acres of tidal wetlands and 60 upland acres, providing habitat for terrestrial and aquatic species alike and outdoor recreation opportunities for naturalists, photographers, hunters, anglers and birders. The marsh supports two rare plants, Eastern Saline Sedge (Endangered) and American Sea-blite (Special Concern), along with three watch-listed plants.

Directions: From the junction of Routes 1 and 110 in Salisbury, take Route 1 North for one quarter mile to Beach Road (Route 1A) on right. Follow Beach Road, and take the first right onto Ferry Road. Follow Ferry Road for 1+ mile and turn left onto Sweet Apple Tree Lane. Follow Sweet Apple Tree Lane to the end and the entrance to Salisbury Salt Marsh Wildlife Management Area.