The Condor 92:539–540

BOOK REVIEWS

MARCY F. LAWTON, EDITOR

Saving the tropical forests.—Judith Gradwohl and Russell Greenberg. 1988. Island Press, Washington, DC. 214 p.

Research priorities for conservation biology.—Michael E. Soulé and Kathryn A. Kohm [eds.]. 1989. Island Press, Washington, DC. 97 p.

The problems of conservation are, at root, those of human demography and economics. The inexorably growing human population, our seemingly insatiable appetites, our teeming wastes, and our political conflicts seem largely beyond the control of conservation biologists. This is explicitly acknowledged almost everywhere. This is sad news for biologists, but it does not leave us without a role to play in the tragedy of our times.

Few of us have the training or the psychological inclination to be lobbyists in the large congress of global public opinion, so as conservation biologists we must offer mainly palliatives and minor repairs. This is not to denigrate either conservation biologists or the authors of these books; I myself prescribe the ecological equivalents of band-aids and Nyquil (they hide some ugliness and let my conscience sleep easier), but rather to give us a larger perspective on the central issue.

Saving the tropical forests and *Research priorities for conservation biology* agree that people are the conservation problem, and that the tropics deserve special attention, but then diverge markedly in their effect and content. This is a matter of aim: *Research priorities,* published in cooperation with the Society for Conservation Biology, was explicitly written for "researchers and funders." Gradwohl and Greenberg, on the other hand, wrote for the educated lay public; *Saving the tropical forests* was published in association with the Smithsonian Institution in conjunction with its traveling exhibit, "Tropical Rainforests: A Disappearing Treasure." Island Press, incidentally, should be thanked for the timely and inexpensive production of such cooperative efforts.

Research priorities for conservation biology is a drably utilitarian little book—dutiful, necessary, and uncompromisingly boring. It will be cited in every grant proposal that can find an excuse to squeeze it in. Mind you, I'll use it myself, largely for self-justification. Since it says, in effect, that we need to conquer ignorance and protect land, few will be offended.

On the other hand I can quibble with at least some of the more specific recommendations. The call for a few major tropical research sites, for example, needs to be weighed against the extraordinary diversity among tropical locales. I think our money might be better spent setting up many long-term phenological, demographic, and climatic monitoring sites, which could be monitored cheaply by local personnel. Everybody, of course, will find his own complaints, in accordance with his particular bents and biases.

This points up the chief failing I see in *Research priorities*: the lack of prioritization. Some very expensive areas of science (notably high energy physics and astronomy) have been quite successful in funding large projects mainly because they have reached something close to an internal consensus about what needs to be done next. Conservation biology has yet to do this, and I'm afraid *Research priorities* doesn't really help forge such agreement. Its coverage might be best described as briefly encyclopedic. Listed in Chapter 2, "Ecosystems: Conservation and restoration," as priority areas of research are remote sensing of deforestation, species and community responses to disturbance and stress, species monitoring methodology, cumulative environmental impacts, climatic change and diversity, spatial organization of reserves and climate change, restoration ecology, roads as avenues of environmental degradation, and landscape scale integration of agriculture and wildland management. These are all worthy topics—but there are seven more chapters to go, each with a similar parade. I think a "funder," say a congressman or congressional staffer, might legitimately say, "Well, this is nice, but why don't you prioritize these things for us."

If you aim to influence someone other than a conservation biologist, don't send him *Research priorities.* Send *Saving the tropical forests* instead. It's a seductive and endlessly entertaining book. Predictably, a litany of horror occupies the first 50 pages. Tropical forests are rapidly turning into pastures and variously degraded wastelands as poor people try to wrest a better life from a hard world and as greedy people seek quick money from one-shot extractions of resources. The next 150 pages, however, are packed with hope. They offer 38 concise case studies of conservation, sustainable development, and environmental rehabilitation. These range from the Kuna management of their homeland in the isthmus of Panama to reforestation in southern China, from Maya agriculture to Javanese home gardens, from reforestation on Brazilian bauxite mines to watershed protection and agricultural development in Sulawesi. It's an astounding introduction to the diversity of approaches to tropical conservation. It's also a smorgasbord. I started reading the book straight through, made it through 10 forest reserves and two sustainable agricultures before skipping off to read the natural forest management schemes, then hopped back to read about iguana ranching and Japanese farmers in Amazonia, before going to the final section on forest restoration. References at the back of the book allow each case to be pursued in the technical literature.

I don't believe we have made, or will ever make, an end to nature. I suspect rather that we will come to our own natural end someday. But we are responsible meanwhile for some considerable ugliness. In our quest for more comfortable lives we have defaced nature. Surely we need to know more about all the things presented in *Research priorities,* but more surely still we must profoundly alter our notions of acceptable land use. The future of much of the tropics will be selected

from the global cultural, economic, and ecological diversity sampled in *Saving the tropical forests.*—ROBERT O. LAWTON, Department of Biological Sciences, University of Alabama in Huntsville, Huntsville, AL 35899.

Die Vogelwelt Ussuriens.—A. J. Knystautas and J. B. Shibnev. 1987. A. Ziemsen, Wittenberg-Lutherstadt. 188 p.

As its subtitle states, this book treats avian faunistics between the Amur River and the Sea of Japan. Ussuria lies in the warmest Pacific coastal area of the U.S.S.R., with the Amur separating it from the rest of Siberia, the Ussuri River from Chinese Manchuria, and with the harbor city of Vladivostok at its south end, at the latitude of our Eugene, Oregon.

Thus we are looking at the landscapes and their birds on the opposite side of the Pacific. What are the similarities, what are the differences? Both areas are flanked by an island (Vancouver Island on our, Sachalin on the Asiatic side). Both are mountainous, with river valleys (Villamette and Columbia here, Ussuri and Amur there) separating the coastal mountains from the hinterland, which is also mountainous in both cases. Thus the geographic setting is quite similar, but when we read about the climate, the differences prevail. Ussuria lies on the eastern flank of a huge continent, our comparable area on the western side of North America. Thus the climate of Ussuria, as described here, is like that of northernmost New England or the Canadian Maritimes, with cold currents dampening the humid summer heat and the same currents exacerbating the bitter cold of the winter months.

The breeding avifauna of the area is very rich compared to either western or eastern North America at the same latitudes: it comprises 262 breeding species. Of these, there are 44 boreal forest, 50 Chinese broadleaf forest, 19 Indomalayan, 14 European, six Mongolian, and one Tibetan species. In the boreal forest of Ussuria we find the Boreal Owl, Three-toed Woodpecker, Gray Jay, Black-capped Chickadee, and both crossbills (the same species on both sides of the Pacific). *Falcipennis falcipennis* is the sister species of our Spruce Grouse, as is the Black Woodpecker and our pileated one, the Japanese Waxwing and our Cedar Waxwing, the Goldcrest and our Kinglet, etc. But the long list (15 species) of flycatchers, wood warblers, and thrushes, which the authors classify as elements of the boreal fauna, do not have taxonomic relatives, and only a few ecological counterparts, in the Nearctic Realm. This fact, coupled with the list of identical or sister species, point toward the Siberian taiga being the "mother ecosystem" of our Nearctic boreal forests—at least as the difference in the diversity of the two avifaunas indicates.

The broadleaf forest fauna shows few relations: the Mandarin Duck with our Wood Duck, three species of grosbeaks to our Evening Grosbeak, one bird, the Tree Creeper, being identical. The rest of the Chinese and European forest birds are new for the American user of the book; among the Indomalayan, Mongolian, and Tibetan forms we do not spot any faunal resemblance either. The above speculations are of the reviewer, not of the authors. They indicate that the detailed ecological descriptions and groupings stimulate the North American reader to make such comparisons, and therefore the book is worth our attention. The data on altitudinal distribution would also be fascinating to compare, had the translator or the publishers (in East Germany) not confused and mixed up the author's (in Lithuania) tabulations and figures in this particular chapter (as he wrote me in an apologetic letter).

Author Knystautas is a first-class nature photographer. Of his 207 photographic renderings, the majority show birds, often with their nest and young; a few depict characteristic mammals (such as the mighty Siberian tiger, the Tibetan collared bear, the sika deer, and others) and other animals, but the balance show landscapes. These photos are in a class with the best ones in our nature magazines. The landscapes, or, more scientifically, biomes, are described in a chapter together with their birds: broadleaf and mixed forests, montane coniferous forests, valley glades, wetlands, cultivated fields, and the magnificent seacoast. In each chapter there is a description, tabulation, and discussion of the avifauna, including its original elements and conservational status, with emphasis on the rare and vanishing species and on the protective efforts taken to assure their survival.

You do not have to read the German text: the pictures speak for themselves. Of the wetland birds, I enjoyed most the several species of cranes—most of them very rare elsewhere—or the photogenic Mandarin Duck at home, in the sloughs of the riverside forest. The Green-backed Heron is our old acquaintance; the Garden Thrush (*Turdus hortulorum*) is a bleached-out American Robin, while the Slate-colored Thrush seems to me a melanistic rendering of our Varied Thrush. The wood warblers (*Phylloscopus* spp.) are ecologic counterparts of our vireos, or so they seem with their olive-green tunics and light eye stripes. We find also the cousin (*Euphona migratoria*) of our Evening Grosbeak, but the male displays a pitch-black head!

Apart from the influx of some bright, exotic southern Asiatic passerines, the most surprising for a North American, but even for a North European reader, is the variety of brightly colored buntings. Beside the color photos of some, a painting shows 11 buntings (genus *Emberiza*) black, white, foxred, yellow, and grey colors in an amazing variety of picturesque head, shoulder, and wing stripes. This is thought-provoking for the comparative ornithologist; why are our warblers colorful, but not the Old World warblers? Conversely, where are our counterparts of this assembly of Siberian buntings?—If you cannot visit Ussuria next season, but you understand German, read this book; you will not find answers, but you might make many more fascinating comparisons.—MIKLOS D. F. UDVARDY, Department of Biological Sciences, California State University, Sacramento, CA 95819.