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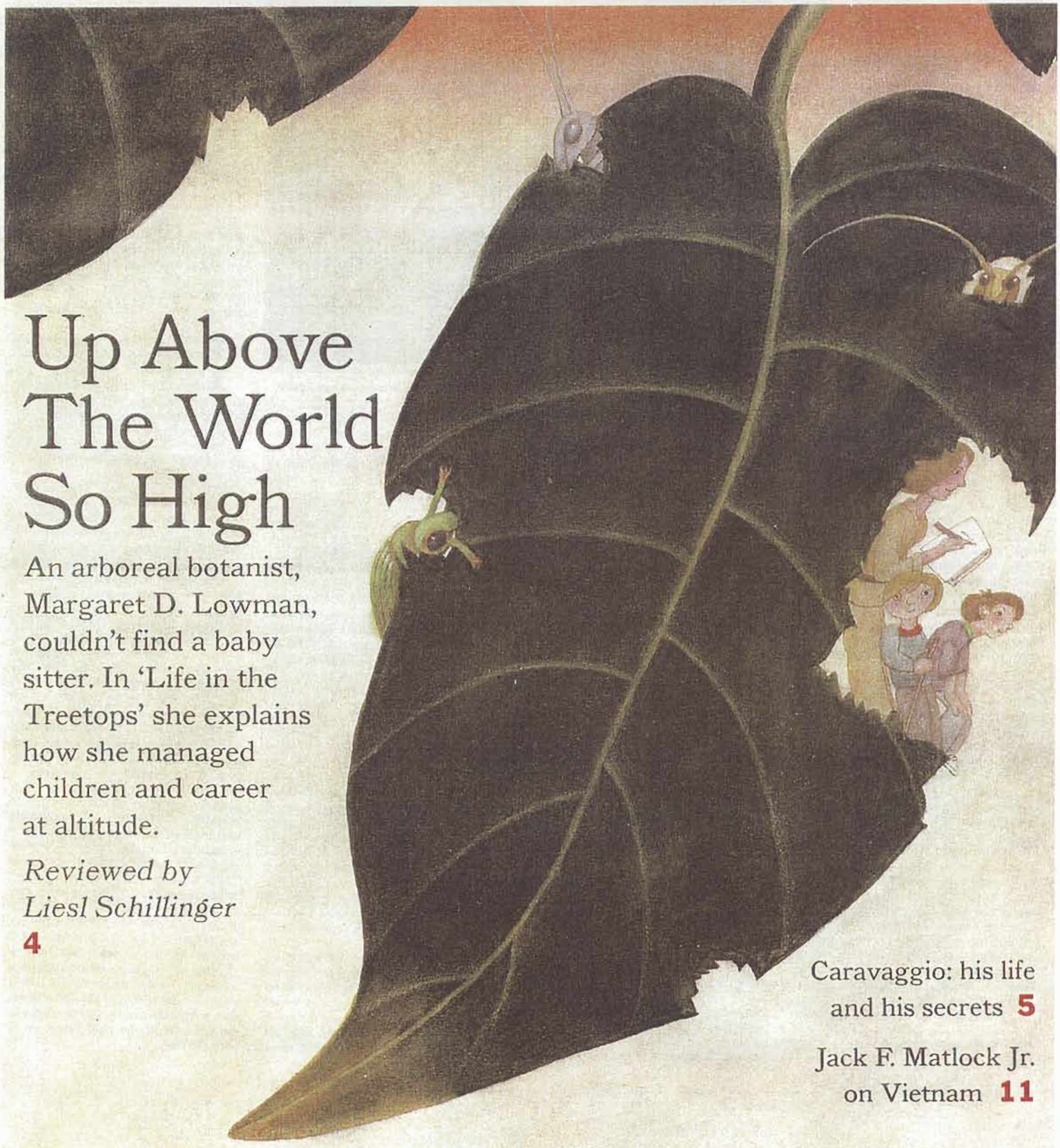

Up Above The World So High

An arboreal botanist, Margaret D. Lowman, couldn't find a baby sitter. In 'Life in the Treetops' she explains how she managed children and career at altitude.

Reviewed by Liesl Schillinger

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Arbor Days

A botanist recounts falling in love with a leafy canopy few people get to see.

LIFE IN THE TREETOPS
Adventures of a Woman in Field Biology.
By Margaret D. Lowman.
Illustrated. 219 pp. New Haven: Yale University Press. $27.50.

By Liesl Schillinger

IT'S hard to be a working mother: if it isn't enough that you have to spend your days dodging venomous snakes and turkey droppings as you scale giant stinging trees, you have to make sure the kids don't fall when they clamber up after you into the tree canopy, 72 feet above the forest floor. And of course you can never count on your husband to remember to load the diapers and "Pat the Bunny" into the daypack. No, it has to be you, you, you from just before dawn, when he slinks off into the outback to herd sheep, till nightfall, when you wearily pluck the tarantulas from the ceiling above your sleeping sons, catalogue a few hundred leaf specimens and get back to the kitchen. Still, you can take comfort in knowing that hundreds of thousands of other American moms face similar problems.

In "Life in the Treetops," Margaret D. Lowman, director of research and conservation at the Marie Selby Botanical Gardens in Sarasota, Fla., gives a funny, unassuming and deeply idiosyncratic chronicle of her trials and triumphs as a field biologist of tree canopies and other ecosystems in Australia, New England, Belize, Panama and elsewhere. Like Elaine May's unworldly botanist in the memorable 1971 film "A New Leaf," Lowman stumbles bravely through the painstaking tasks of her scientific life, blissfully unaware of the hazards that lurk behind every jungle creeper and behind her own curtains. Raised in upstate New York by quiet, conservative schoolteacher parents, Lowman studied at Williams College and got her master's degree in ecology in Scotland, at the University of Aberdeen (her thesis topic: the seasonality of highland birches). Then, in 1978, worrying that she had acquired a "temperate bias," she decided to switch her focus to the study of tropical forests. She accepted a botany scholarship from the University of Sydney, in Australia, overlooking one small detail: "I was so naïve," she ruefully admits, "that I failed to realize that Sydney was more than a thousand kilometers from the tropics." Undaunted, she decided to study the habits of rain forest butterflies, but when a supervisor gently pointed out the difficulties of, first, getting butterflies to show up at all, and, second, getting them to stick around for close inspection, she wisely turned her gaze to leaves instead. In one of many marvelous deadpan declarations, Lowman humbly explains, "I did not intend to climb trees as a career."

ED LOWMAN/FROM "LIFE IN THE TREETOPS"

Margaret D. Lowman and her children on a rain forest canopy walkway in Belize.

Nonetheless, on March 4, 1979, she launched herself into a high crook of a coachwood and was hooked. "From then on," she writes, "I never looked back . . . or down!" Lowman threw herself into the study of native trees — Antarctic beech, coachwood, eucalyptus, red cedar and stinging gymple-gymple — and the herbivores that preyed upon them. With the aid of improvised slingshots that fired ropes into tree crowns, she pulled herself up thousands of Australian tree stands to examine leaf predation patterns. When she needed help in tree rigging, leaf measurement and site surveys but couldn't pay for it, she gamely arranged a work-barter system, donning a snorkel and a butterfly net to swim after Australian sea snakes (some of the most poisonous reptiles in the world), in return for which her herpetologist colleagues helped her sample leaves, ignoring minor inconveniences like leeches, one of which once crawled unnoticed into a field partner's eye as he intently scanned the forest floor for seedlings.

During the first five years of her stay, Lowman's observational and deductive skills helped solve a number of regional arboreal mysteries. Which opportunistic herbivore was responsible for the sporadic massacre of Antarctic beech tree canopies? Who or what was devouring the sharp, poisonously furred leaves of the gymple-gymple tree? Why were entire forests of eucalyptus dying out? (The answer in each case turned out to be one kind of beetle or another, abetted by assorted human and environmental factors.) There was only one species of indigenous fauna Lowman failed to study: men, to the confusion of tradition-bound Australians, who couldn't understand why a fine-looking sheila in her late 20's would want to go about in khaki hacking pants with a machete and put more energy into hunting a leaf-eating beetle than hunting a husband.

At the age of 29, Lowman quieted local consternation, for a while at least. With unintentionally comic effect, she describes her courtship and reproductive history with the same clinical detachment she might bring to bear on the caterpillar stage of a Christmas beetle. "Through our mutual interest in dead trees, I met a local grazier and married him," is her first mention of the farmer (owner of 5,000 acres of pasture, sheep and cattle) who was to be her husband. Lowman credits the match to no more romantic agents than "age-related hormones" and her "strong nesting instinct." That motherhood would interfere with her vocation came as a shock. "My first suspicions of pregnancy arose while I was perched in the canopy of a black bean tree . . . in north Queensland," she says, remembering that a sudden wave of nausea surprised her, since "under normal conditions, canopy work from a stable tower was a virtual joy for me, compared to working from swaying ropes."

Seven months later, she made one concession to her condition: "I allowed myself the luxury of a cherry picker for access to tree canopies." She mourned the lack of female mentors, failing to consider the fact that she was, after all, a pioneer, and that in the late 70's and early 80's viable mentors in treetop fiel biology were few, whether male or fe male, with or without children. Indeec the kind of canopy exploration Lowma conducted was being invented as she di it, and she has been among the first t take advantage of the ecologically minc ed aerial walkways and balloon expl ration rafts developed only over the las decade, some of them with her in mind

After her first son was born, an then a second, Lowman still managed t combine child rearing with leaf char ing. Like a mother orangutan, she too her infant sons with her on forest exp ditions, because her mother-in-la would baby-sit only for suitably fem nine exigencies like beauty appoin ments, not for "this academic stuff. Lowman would survey seedlings for few hours, scramble down to earth t nurse, scramble back up to her vertig nous laboratory and then drive hom (avoiding kangaroos by sheer luck — ' am embarrassed to admit," she notes - too harried to register the exoticism c her daily difficulties) in time to mak dinner for her baffled herder husband.

"I PURSUED my housewifery wit great seriousness, in addition t my science," she writes. "I s cretly believed that if my in-law could see that scientific pursuits did nc preclude attention to housewifery, the they might be supportive of my acaden ic career." Determined to continue he groundbreaking work, she struggled t be not only Supermom but Spider-Ma Luckily for the female biologists wh will learn from Lowman's struggle an seek to follow in her agile footsteps, sh never took the time to ask herself if suc a feat was possible. As a sign of the futi ity of her efforts to win over her hu band's family, her sister-in-law one da gave her a poem that extolled th drudgery and sacrifice of the good ou back wife, beginning "They're the wive and the mothers of men on th land; / Just cooking, encouraging, len ing a hand" and concluding "Your who selfless life is an unwritten poem." Lov man didn't think so. In 1990 she left Au tralia with her two sons and took up a fe lowship at her alma mater, Williams Cc lege. She never returned to her hous wife life in the outback, and she has ne er abandoned her home in the trees.

With a wonderfully plain-spoken a proach, based on nature appreciatio scientific observation and unpompot explanation, Lowman engages the e virophiles among us who grew up watc ing friendly-nerd science programs lil "3-2-1 Contact" and who still yearn brush dust off a stegosaurus bone or pe sonally resuscitate a patch of rain fore or merely see an IMAX film on the Am zon before we die. She has become th mentor she never had. Her book a mirably shows that a woman who is u willing to accept impossibility can n only rock the cradle. If she can write h own script, she can carry her cradle in the treetops of the rain forest — a rock the tree.

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