

# INVESTING IN NATURE



CASE STUDIES OF LAND CONSERVATION  
IN COLLABORATION WITH BUSINESS

WILLIAM J. GINN

# Investing in Nature

Case Studies of Land Conservation  
in Collaboration with Business

William J. Ginn



Washington • Covelo • London

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# About Island Press

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## Acknowledgments

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For many years in the early spring we drove from my home in suburban Cleveland to rural eastern Pennsylvania where my grandparents lived. My grandfather operated a small truck farm and tended apple orchards in the area while delivering bread door to door. I spent my days wandering on the well-worn forest paths behind their farm, free for a change from the pavement and grids of suburbia. On warm spring mornings I sat with my grandfather by the woodpile while he showed me how to identify the rich red grain of oak, the smooth creamy maple grain and the course texture of the occasional pine log. I thought then, how extraordinary to know such things. Later, when nearly eighty years old, my grandfather fell out of an apple tree he was pruning and never really recovered. I can't think of a better way to go. I still smile when I split wood behind my own barn and think of him, my namesake.

On one of my last trips before my grandfather passed away—I was about ten years old—I discovered a new subdivision of pastel-colored houses pushing into the back of the woods in neatly cleared lots—suburban Philadelphia was even then encroaching on the ring of small farms around the city. I had no vocabulary to express my feelings—Earth Day was still ten years away and words like *environment* and *biodiversity* were unknown to me. Now, forty-odd years later, I still remember my profound sense of loss. This was the beginning of my environmental awakening.

I am grateful to my parents, Bill and Arlene, who were shocked when I announced that I was forsaking an elite New England college to attend a small start-up environmental school on the coast of Maine. The privilege of attending the first year of the College of the Atlantic and their support for all of my endeavors then and since has made all the difference.

Many colleagues and friends have made lasting impressions on me—many more than I can possibly name here but I must mention a few. Dick Anderson and Sherry Huber, my first bosses at the Maine Audubon Society took a chance in hiring me and I am grateful always for their inspiration, energy, and lifelong friendship. My colleagues at Resource Conservation Services stood by the company in some dark moments and shared with me in our successes. In particular Sandy Wyman (who offered to loan me back her first paycheck if it would help me keep going), Steve Weems, Tom Rumpf, Jay Kilbourne, Jamie Ecker, Kathy Peck, Peter Coleman, and Jo D. Saffeir come to mind among many fine friends. Peter Forbes of the Center for Whole Communities invited me to spend a week with him in Vermont. His work with communities gave me new insights on the importance of people to our environmental work.

At The Nature Conservancy, my employer of the last six years, many have shaped and challenged my conservation preconceptions. Peter Thomas of New Zealand took me under his wing in my first days with the Conservancy and showed me what working with communities on conservation was all about. Kelvin Taketa, Phil Tabas, Dennis Wolkoff, Kent Gilges, and Suzanne Case inspired me with their vision and commitment to the Conservancy's mission. Hans Birle did the lawyering on many of the projects I write about with creativity and absolute persistence for perfection. Kent Wommack taught me about dreaming big dreams. John Cook followed his instincts in hiring me when I came back to Maine and has mentored me through more reorganizations than I care to remember.

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recommendations are my own and do not imply endorsement by them or their boards.

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For twenty-eight years, one person has kept the candle burning in the window on many late and lonely nights. June LaCombe, friend, confidant, moral sage, and partner, I am grateful that you liked my rhubarb pie so long ago and decided to give me a chance.

# Contents

*List of Figures, Tables, and Boxes* ix

*Acknowledgments* xiii

## **Introduction**

The Scale of Nature 1

## **Part 1**

Conservation Investment Banking 15

### **Chapter 1**

Partnering with Big Timber 17

### **Chapter 2**

Debt for Nature: The Story of the Katahdin Forest 42

### **Chapter 3**

Bankruptcy and Biodiversity 53

### **Chapter 4**

Investing with an Attitude 63

## **Part 2**

Creating New Environmental Markets 73

### **Chapter 5**

Carbon and Forests 75

### **Chapter 6**

The Bank of Nature 92



**Part 3****Incentives 105****Chapter 7****Greening Business 107****Chapter 8****Tax Credits for Conservation 119****Chapter 9****Incentives for Working Landscapes 136****Part 4****The Path Forward 155****Chapter 10****If You Build It, Will They Come? 157****Chapter 11****Conservation at the Scale of Nature 168****Chapter 12****Crossing the Divide 181***Notes 185**Bibliography 191**Index 201*

# List of Figures, Tables, and Boxes

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## Figures

- Figure I.1** Furbish's lousewort *Pedicularis furbishiae* 2
- Figure I.2** St. John River, Maine 3
- Figure I.3** Federal Land Conservation Spending 6
- Figure 1.1** IP's Connecticut Headwaters Property, New Hampshire 18
- Figure 1.2** Connecticut Headwaters: Unbundling the land rights 21
- Figure 1.3** Major Buyers and Sellers of Timberland, 2004 24
- Figure 1.4** Map of Tug Hill, New York 29
- Figure 1.5** Map of Spring River 32
- Figure 2.1** The Katahdin Forest, Maine 44
- Figure 3.1** Chile's Valdivian Coast 54
- Figure 3.2** Trillium's Rio Condor Project 59
- Figure 4.1** Map of the Fishing Grounds, Gulf of Maine 65
- Figure 5.1** Noel Kempff National Park 76
- Figure 6.1** The Malpai Borderlands 94
- Figure 6.2** How Grassbanks Work 96
- Figure 6.3** Clinch River Timber Bank 102
- Figure 7.1** Canada's Boreal Zone 111
- Figure 7.2** Great Bear Rainforest 112
- Figure 8.1** Kelda's Decision Calculus 123
- Figure 8.2** Using New Market Tax Credits for Conservation 131
- Figure 10.1** Virginia's Eastern Shore 159
- Figure 10.2** Major Threats to the Josephstall-Madang Province, Papua New Guinea 165

**Figure 11.1** The Northern Forest 169

**Figure 11.2** Northern Forest Biodiversity Strategy 171

**Figure 11.3** Scaling Factors for Reserves in the Northern Forest 174

**Figure 11.4** Major Conservation Projects, 1990 and 2002 179

## Tables

**Table I.1** Field Guide to Market-Based Tools for Conservation 12

**Table 1.1** Major Timberland Owners 23

**Table 1.2** Major Institutional Investors in TIMOs and REITs 26

**Table 1.3** Comparing Connecticut Headwaters with the St. John Purchase 28

**Table 1.4** Fish Creek Project—Tug Hill, New York 31

**Table 5.1** Maine Forestry Greenhouse Gas Savings 84

**Table 5.2** Sampling of State and Regional Efforts to Control Climate Change 89

**Table 8.1** Summary of State and Federal Income Tax Credits for Conservation, April 2003 132

**Table 9.1** Outlays for Mandatory Agricultural Incentive Programs 142

## Boxes

**Box 1.1** Key Concepts in Partnering with Private Capital 34

**Box 1.2** Field Guide to the Timber Investment Organizations 36

**Box 2.1** Debt for Nature 50

**Box 3.1** Conservation Investment Banking 62

**Box 4.1** Investing with an Attitude 71

**Box 5.1** Working on Forest Carbon Issues 86

**Box 5.2** Resources for Carbon Projects 88

**Box 6.1** Model Grassbanking Projects 97

**Box 6.2** Resources for the Bank of Nature 103

**Box 7.1** Forest Certification Resources 118

**Box 8.1** Ways to Utilize New Market Tax Credits for Conservation 129

- Box 8.2** Tax Credits and Incentives 130
- Box 9.1** Environmental Quality Incentives Program (EQIP) Projects 140
- Box 9.2** Center for Conservation Incentives, Environmental Defense  
Fund 143
- Box 9.3** Federal Government Programs 144
- Box 10.1** Lessons about Compatible Development 167
- Box 11.1** Major Land Conservation Transactions—Vermont, New Hampshire,  
and Western Maine 176
- Box 11.2** Northern Forest Resources 180

# Introduction

## The Scale of Nature

Perhaps it is time for the conservation movement to leave the comfort of our past successes and direct our formidable resources toward new solutions, new ways of thinking about our work. Nothing is harder to do because it means making new arguments and new friends.

—Peter Forbes et al., *Coming to Land in a Troubled World*

For a flowering plant, the furbish lousewort is rather unremarkable, barely a foot tall with small anemic, yellow flowers. As an inhabitant of the gravel bars and ice-tossed shorelines of northern New England's rivers, however, the lousewort loomed large in the debate over the construction of the Dickey Lincoln Dam on Maine's rugged and remote St. John River back in the early 1970s. On one hand, proponents of the dam pointed to its inconsequential stature as an example of all that was wrong with the Endangered Species Act. On the other, opponents celebrated its existence as part of the diverse fabric of a great river system. Ultimately the dam project failed, in part because of the controversy over the impact on this small plant. Even now, thirty years later, the precedents set by the lousewort are at the heart of our policy toward endangered species.

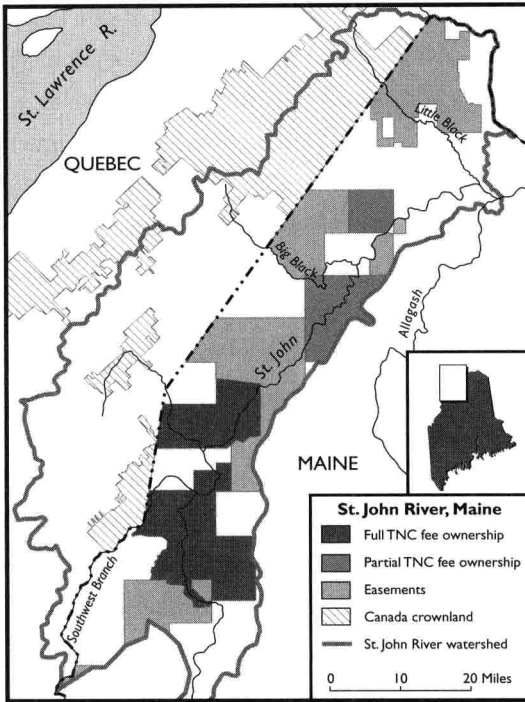
Protecting the lousewort from the floodwaters of the Dickey Lincoln Dam was only the beginning of the conservation story of the St. John River. Two decades later, The Nature Conservancy (TNC) surprised



**Figure I.1**

Furbish's lousewort *Pedicularis furbishiae*.

industry and government officials by purchasing nearly two hundred thousand acres of the headwaters of the St. John from International Paper for the then astonishing sum of \$36 million. No one had ever attempted to raise such a large amount from private sources for conservation, but as Kent Wommack, the Executive Director of TNC's Maine Field Office, tells the story, "When we got the news that TNC had the opportunity to buy the property, we looked around the table and thought to ourselves, how could we possibly do this? But as we thought more about it we realized that the real question was, how could we possibly *not* do it."

**Figure 1.2**

St. John River, Maine.

A series of subsequent land trades, easements, and purchases over the last five years have boosted protection to over 150 miles of shoreline and over six hundred thousand acres. Because of its breathtaking size, the St. John River project is legendary in conservation circles, and it has become the standard against which many other landscape scale conservation projects are measured.

Despite these Herculean efforts and over \$50 million of conservation investment, assuring the long-term ecological viability of the furbish lousewort remains elusive at best. The St. John is an unusual river as North American rivers go, in that it flows almost due north toward the Canadian border. This northward track means that spring comes earlier to the southern headwaters of the river. As melt water builds northward, it often encounters frozen ice that results in massive ice jams and flooding that

scour river banks and gravel bars clean of large vegetation. It's this ecology that makes it possible for the lousewort to survive against competition from raspberries, alders, and spruce trees. In a world where by all accounts we are headed toward a warmer climate—perhaps by as much as five to eight degrees—will the reduction in ice continue to favor the conditions that support the lousewort? Recent modeling from the U.S. Forest Service suggests that New England forests will be profoundly changed in a warmer world. In the next century the line of spruce and fir trees linked so closely with the image of Maine will be pushed back north of the Canadian border in most places. The St. John River may be the last bastion of this forest type in the United States.

Addressing broad scale threats to ecological systems like climate change will be extraordinarily challenging for conservation because the problem requires new skills and competencies beyond simple land acquisition. We will be required to think about people, their role in the landscape, and the systems that hold us together as communities: governments, commerce, business, and the essential cultural and human values that control so much of how we use resources.

For conservationists the message is clear. Working at nature's scale is essential. Putting fences around small patches of land will not save the lousewort. Protecting six hundred thousand acres may not save the lousewort. Even moderating overwhelming changes in our climate will not prevent the catalog of extinction from growing. Only by being successful at *all* of these scales will the lousewort, and the millions of other species of plants, insects, and animals—from the charismatic right whales to the lowly ants—be truly protected.

The great challenge to working at the scale of nature is that a competing system is operating at the same global scale. Its power is challenging the fabric of our natural systems. The nearly irresistible forces of business and commerce increasingly dominate culture, politics, and even



our natural environment. Unless we are prepared to confront the direction of the global economy, our conservation efforts will fail.

Since 2000, over 3.1 million new houses have been built in the United States.<sup>1</sup> The decline in forestland in the last fifteen years to make way for this and other development has been alarming. North Carolina has lost over 1 million acres of forest to clearing and conversion to development and even in rural Maine nearly 200,000 acres were developed in the period.<sup>2</sup> And in the year 2002, the U.S. economic engine generated \$11 trillion worth of goods and services alone.<sup>3</sup> At the base of the American and every other world economy is the use of nature's resources—land, timber, soil, water. In a world with a population headed from over 5 billion to at least 9 billion, the pressure on our natural systems will grow even greater.

Now compare those realities with the funds available for investing in conservation. In 2005 the U.S. government will spend a paltry \$314 million to expand its parks and protect wildlife refuges, national forests, and shorelines.<sup>4</sup> Groups like TNC, Trust for Public Lands, and the Conservation Fund raise millions more from private donors, and while these efforts may double the amount available from government, but the combined sums remain woefully inadequate. Then one must factor in the plight of biodiversity hotspots like Papua New Guinea and Indonesia. With much of their populations living at a bare subsistence level, funding for conservation is a low priority for governments dealing with faltering economies and crises in health care and education. Here the forces pushing development make the tools of conservation seem weak and wholly inadequate to the task ahead.

These are not new thoughts or statistics—and it is easy to be discouraged. But against these odds, a small group of dedicated business people turned environmental entrepreneurs and conservation-oriented investment bankers are pioneering a new set of market-based conservation tools in partnership with business. These practical visionaries have protected