

## FOREST RECREATION ON PRIVATE LANDS

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### Summary

This chapter examines the growing tendency of smallholder landowners to maintain forests on their properties, especially in the tropics. It emphasizes that while recreation is an extremely strong motivation for such forestry, numerous additional motives exist. While most of these motives relate directly to forest conservation ethic, others stem from financial goals or a desire to blend ecology with economics. A discussion of the myriad ways landowners use their forests casts further light on owners' underlying motivations. The chapter also describes the key challenges that recreational foresters face such as poaching, lack of government support, squatter invasions, and biological isolation. The final section provides in-depth profiles of recreational forest owners in one developing country.

### 1. Introduction

Governments have long been the principal force behind forest protection worldwide. The quality of governmental protection, however, has often proven inadequate, with many forest parks existing only on paper. Even if publicly owned forests were well protected, more than 93% of the Earth's land area and most of its forests would still remain unprotected. Given ongoing habitat destruction, especially in the tropics, it is

imperative that the conservation community develops additional approaches for forest protection.

Privately owned protected forests (POPFs) have emerged as one option. POPFs areas are proliferating throughout much of the world yet little is known about them. Research has begun to address privately owned protected forests, but only indirectly.

A few case studies highlighting various aspects of specific forest preserves have been completed, and three researchers have conducted international mail surveys revealing typical activities, problems, profitability, and other attributes.

Additional studies have verified the private sector's increasing role in forest conservation. What is clear from these studies is that landowners are increasingly taking forest protection matters into their own hands for a variety of reasons, among them recreation.

Despite the recent proliferation of POPFs and studies of them, they remain largely a mystery. Even experienced conservationists are hard-pressed to name more than a few of the world's privately owned forest parks, let alone place them into a larger conservation context. Why are these forests being protected? What types of activities occur in them? What challenges do these recreational foresters face?

This article attempts to answer these questions. It reviews the current state of knowledge regarding POPFs, emphasizing their underlying motivations, main uses, and key challenges. It also provides detailed forest owner examples from one country (Costa Rica) that bring the chapter's main points into focus. Given limited public resources available for forest protection and growing interest in the role of private landowners, it is important that a systematic examination of this forest protection approach begins.

## 2. Overview of Recreational Forestry

For the purposes of this chapter, recreational forestry refers to attempts by non-professional foresters to grow or protect a forest for reasons that may include, but are not limited to, commercial production. Thus, recreational forestry represents the lesser known alternative to professional commercial forestry (see *Forest Plantations*). This section describes why people engage in recreational forestry, the activities they conduct, and several key challenges they face.

### 2.5. Understanding Landowner Motivations

Why do landowners protect forests? While the answer varies across countries and individuals, one thing is certain: recreation forms only part of the picture. This section provides a typology of landowner motivations for protecting forests. It is based on interviews with forest owners in several developing countries, especially Costa Rica.

Primary	Secondary	Specific motive
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Conservation (biocentric: protect nature for nature's sake)	Preventing ecological degradation	protect nature, protect biodiversity / species / or wildlife in general, protect forests, combat destruction / development / contamination, protect habitat, protect "life of the planet" or "living system", protect soil, protect equilibrium in nature
	Other nature-related motives	sense of duty to protect planet / "do our part", wanted a more effective approach than wasting money on conservation organizations, environmental education for local residents & school children and for tourists who visit the forest
Conservation (anthropocentric: protect nature for human benefit)	Ecosystem services	our natural area helps purify the atmosphere, our natural area helps produce oxygen, protect watersheds in general, protect my particular water supply, protect water supply for people living downstream
	To benefit "future generations"	For my progeny: for general benefit of my children or grandchildren, so my children can live in a natural area, like I did, transmit natural knowledge and experience to my kids For society's progeny in general: our duty to provide them with natural patrimony, minimize environmental problems they will face, provide them with adequate oxygen supplies
	To promote development	Promote economic development for locals, a way to create eco-friendly jobs for locals
Direct Profit (protect nature for cash)		source of fuel, source of building materials, a place to host ecotourists, a place to host scientific researchers, to qualify for government incentives in general, to qualify in particular for property tax exemption, as a real estate investment -- appreciation in land value
Indirect Profit (protect nature for potential revenues or to avoid costs)		potential source of medicines such as plants that combat parasites in cattle, protecting nature provides good publicity, security – mangroves prevent thieves from stealing our cattle by boat
Psychic Profit (protect nature for psychological or	Emotional	Likes/Loves: nature/animals/trees/land/wildlife, It's "beautiful" or "pretty", we "need contact" with nature, provide "value to the world" or a "gift to world", always wanted to live in natural area, for the "personal enjoyment" it provides, because it makes us feel "peaceful" and "happy"

emotional needs)	Lifestyle issues	escape the city in general, escape career rate race & its unhealthy lifestyle, create a sanctuary where people can escape, personal "fortress" to hide during World War III, to have a simpler, less consumptive lifestyle, physical health: doctor ordered me to the country
	Family reasons	Maintain a family tradition of rural living, family tradition – spending time together in jungle, honoring deceased father’s conservation beliefs, conserving nature is a legacy/lesson from father, promote family unity – working together in forest keeps us close
	To conduct scientific research	place where visiting scientists can study – a “living classroom”, place where students from our college can study
	Personal challenge	forest fulfills my goal to own and protect land, forest presents entrepreneurial challenge, forest presents a way to "find myself", forest helps us learn to live with nature & with each other
	Spiritual	forest gives me spiritual “plentitude”, forest gives me place to “communicate” with nature, forest lets me be around nature's “energy”, protecting nature is a form of service to God
Other	Combine ecology with economics	several owners explicitly mention philosophy of combining profit with protection. Others list ecological as well as economic motives, without explicit linkage
	Protected forest is the “best” land use option	"no need" to use that land for anything else, land is “unsuitable” or “too steep” for cattle, land is surrounded by other parks which limits access & development potential and leads to destruction of crops by wildlife
	Legality	it is no longer legal to convert forest into pasture

Table 1. Typology for forest owners' motivations.

Clearly, landowners have a wide range of motivations for protecting forests. These motives go beyond simple "recreation", and often stem from a conservation ethic. Examples of conservation-related motives included those of the owner of one POPF who said, "The only motive is conservation. Nothing more. I want to protect that forest. Forever. Because I don't want to see someone come cut down a tree that's 400 or 500 years old". Similarly, another owner commented, "Because I believe that we have to protect the animals. Otherwise they would be extinguished. Look. If I wasn't in this area, you wouldn't be able to find a deer there today". Some owners have more complicated conservation motives, such as the forest owner who explained, "We belonged to a number of environmental organizations - WWF and others. And we found that our money was going to their salaries. It was going toward flying them here, there, and everywhere. It wasn't doing what we wanted it to do. So we bought our own piece

of property, and did what we wanted to do. Money for conservation organizations was being wasted. We're much more effective this way".

Examples of economic motives also abounded. One landowner claimed she protected the forest primarily for monetary gain, noting "The most important reason is money. The appreciation in land value. We bought it so cheap because people thought it was worthless. No pasture. But now, ten years later, things have changed. There are people looking for forests to buy. And there isn't any left in our area. So the value of our forest has skyrocketed". Another owner commented, "Money! Money! Lot's of other people say it's because they love the birds, or that the forest is so beautiful. This is all too romantic". A third owner revealed the common link between tourism and conservation, noting, "In order to make it attractive to the tourists. The hotel wouldn't make any sense if I didn't have a forest. The forest is the biggest attraction for our hotel".

As noted in Table 1, many owners sought to combine economics and ecology. One owner was trying to "see if a system of production and preservation can coexist". Likewise, the owner of six small forest reserves explained, "We believe in combining protection with production. Profit and the environment can coexist. Profit is not a dirty word".

Especially surprising was the wide diversity of motives for protecting nature. One owner claimed that his motivation stemmed from an epiphany moment in which he witnessed the extinction of a species. Another forest reserve owner maintained intact habitat as a security measure. "The security of the farm depends on the mangroves", she commented. "It's a natural barrier against intruders. It is difficult for people to get through the mangroves to rob things from us. They used to rob our cattle by land, now they would have to use a boat. It's a form of protection for our farm". Another was using his forest reserve as a place to escape World War III, noting, "It's very simple.

I'm a bit of a survivalist I suppose...and if you don't have a place where you can go to survive, you're not going to make it. This will be my personal retreat - my fortress". Another owner protected rainforest to atone for previous ecological destruction. "I ran the biggest logging operation in the Amazon for three years. That's the sorriest I am about anything is the forest cutting in the Amazon. I was field manager. We cut down thirty thousand hectares in three years. We were moving fast. I had over three hundred men and a budget of one million dollars just for parts. That tells you what kind of operation it was". Obviously, forest owners have an extremely varied and rich set of motivations for protecting forests that go beyond mere recreation.

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## Bibliography

Alderman C. (1994). The economics and the role of privately-owned lands used for nature tourism, education, and conservation. Pages 273-305, In: M. Munasinghe and J. McNeely (editors), *Protected Area Economics and Policy: Linking Conservation and Sustainable Development*, Washington DC: International Union for the Conservation of Nature and The World Bank. [This paper is the first to draw attention to the recreational role of private lands in the international arena.]

Alyward B., Allen K., Echeverria J., and Tosi J. (1996). Sustainable ecotourism in Costa Rica: The Monteverde cloudforest preserve. *Biology and Conservation* **5**, 315-343. [This article provides detailed analysis of one of the world's largest and most heavily visited private reserves.]

Barborak J. (1995). Institutional options for managing protected areas. Pages 30-38, In: Jeffrey McNeely, editor, *Expanding Partnerships in Conservation*, Washington DC: Island Press. [This chapter outlines different ownership regimes for parks worldwide, including private ownership.]

Bennett J. (1995). Private sector initiatives in nature conservation. *Review of Marketing and Agricultural Economics* **63**, 426-434. [This article discusses the growing trend for private sector involvement in biodiversity protection.]

Brandon K. (1996). *Ecotourism and Conservation: A Review of Key Issues*, Washington DC: The World Bank (Global Environment Division, Biodiversity Series, Paper #033). [This book is the definitive work on the complex relationship between ecotourism and conservation.]

Brandon K., Redford K. and Sanderson S (Eds) (1998). *Parks in Peril: People, Politics, and Protected Areas*, Washington DC: Island Press. [This book demonstrates that despite major efforts, the current approaches to protecting tropical nature are largely failing.]

Dixon J.A. and Sherman, P.B. (1990). *Economics of Protected Areas: A New Look at Benefits and Costs*, Washington DC: Island Press. [This is the first book to detail the myriad economic implications of parks.]

Dwyer J. (1996). *Countryside in Trust: Land Management by Conservation*, New York: Wiley. [This book provides an overview and examples of land trusts.]

Edwards V. (1995). *Dealing in Diversity: America's Market for Nature Conservation*, Great Britain: Cambridge University Press. [In this book a British author examines the United States' increasing emphasis on private lands conservation, and how this emphasis is generating economic activity.]

Gössling S. (1999). Ecotourism - a means to safeguard biodiversity and ecosystem functions? *Ecological Economics* **29**, 303-320. [This article explores the promise and limitations of ecotourism as a conservation mechanism.]

Horwich R.H. (1990). How to develop a community sanctuary - an experimental approach to the conservation of private lands. *Oryx* **24**, 95-102. [This article provides step by step instructions for community groups wanting to protect nature on private lands.]

Langholz J. (1996a) Economics, objectives, and success of private nature reserves in Sub-Saharan Africa and Latin America. *Conservation Biology* **10**, 271-280. [This article updates and expands upon the Alderman chapter listed above, demonstrating key data trends in private lands conservation and recreation.]

Langholz J. (1996b) Ecotourism impact at independently-owned nature reserves in Latin America and Sub-Saharan Africa. Pages 60-71, In: Miller, J., and E.Malek-Zadeh (editors), *The Ecotourism Equation: Measuring the Impacts*, New Haven, CT: Yale School of Forestry and Environmental Studies Bulletin Series, No. 99. [This chapter makes the connection between ecotourism and profitability on private lands.]

Langholz, J., and Brandon K. (2001). Ecotourism and privately owned protected areas. In: D. Weaver (ed), *The Encyclopedia of Ecotourism*, Wallingford, UK: CAB International. [This chapter forms part of the world's most comprehensive analysis to date of the ecotourism phenomenon.]

Langholz J., Lassoie J., and Schelhas J. (2000). Incentives for Biodiversity Conservation: Lessons from Costa Rica's Private Wildlife Refuge Program. *Conservation Biology* **14**, 1735-1743. [This article provides the most detailed analysis yet of a government policy designed to promote conservation on private lands in a tropical country.]

Langholz, J., Lassoie J., Lee D., and Chapman D. (2000). Economic considerations of private protected areas. *Ecological Economics* **33**, 173-183. [This article highlights key economic issues and challenges in protecting nature on private lands.]

Merrifield J. (1996). A market approach to conserving biodiversity. *Ecological Economics*, Vol. 16, pp. 217-226. [This article proposes harnessing the free market on behalf of nature protection.]

Mesquita C.A. (1999). Private nature reserves and ecotourism in Latin America: A strategy for environmental conservation and socio-economic development. Masters thesis, Turrialba, Costa Rica, Centro Agronomico Tropical de Investigacion y Ensenanza (CATIE). [This masters thesis updates previous surveys of private nature reserves in Latin America.]

Murray W. (1995). Lessons from 35 Years of Private Preserve Management in the USA: The Preserve System of The Nature Conservancy. Pages 197-205, In: Jeffrey McNeely, editor, *Expanding Partnerships in Conservation*, Washington, D.C: Island Press. [This chapter describes the world's largest private preserve system, including its major challenges and accomplishments.]

Sayer J. (1991). *Rainforest Buffer Zones: Guidelines for Protected Area Managers*, Gland, Switzerland: IUCN Forest Conservation Program. [This book provides practical advice on blending conservation with economic development in and around parks in the tropics.]

Schelhas J., and Greenberg R. (1996). *Forest Patches in Tropical Landscapes*, Washington DC: Island Press. [This book provides a wide variety of economic and social perspectives on protecting the small stands of forest that often occur on private lands in the tropics.]

Simberloff D.S. and Abele L.G. (1976). Island biogeography theory and conservation practice. *Science* **191**, 285-286. [This is the seminal article on a theory that underlies development of most of the world's protected area networks.]

Van Schaik C., Terborgh J., and Dugelby B. (1997). The silent crisis: The state of rain forest nature reserves. Pages 64-89, In: R. Kramer, C. van Schaik, and J. Johnson (editors), *Last Stand: Protected Areas and the Defense of Tropical Biodiversity*, New York: Oxford University Press. [This chapter provides data showing that despite considerable efforts, most of the world's tropical national parks are poorly protected and declining in health.]

Wells M. (1997). Economic perspectives on nature tourism, conservation, and development. *Environmental Economics Series*, **55**, Washington, DC: The World Bank. [This article provides rich information on Southern Africa's booming market for recreation and wildlife viewing on private lands.]

World Wildlife Fund (1997). *The Network of Private Nature Reserves: Strengthening private efforts in conservation and management of natural lands and resources (Project Profile)*, Washington DC: World Wildlife Fund (4 pages). [This booklet highlights how private landowners play an increasingly important conservation role in a war torn country such as Colombia.]

### **Biographical Sketch**

**Dr. Langholz** is currently an Assistant Professor of International Environmental Policy in the Graduate School of International Policy Studies, at the Monterey Institute of International Studies in Monterey, California. At the Monterey Institute he teaches and researches in the areas of biodiversity conservation,

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Dr. Langholz holds a Ph.D. in Natural Resources from Cornell University, with a concentration in resource policy and management (1999). He earned a masters degree from the University of Maryland (1995) in sustainable development and conservation biology. His undergraduate degrees (1986) are in history and humanities, from Dana College in Blair, Nebraska.

Before joining academia, Dr. Langholz spent five years designing and implementing environmental policy for the US Environmental Protection Agency. He also worked in the fishing industry in Alaska, served as a Peace Corps Volunteer in West Africa, and conducted environmental research in Central America. He is a trained mediator for two- and multi-party disputes in the U.S. and beyond. Recent conflict management experience includes providing training in Environmental Conflict Management at The Hague (Netherlands) on behalf of the International Institute for Mediation and Conflict Resolution.

Dr. Langholz speaks Spanish, West African Krio, and Mende. He has published in a wide variety of transdisciplinary journals, including *Conservation Biology*, *Society and Natural Resources*, *Ecological Economics*, and *Environmental Conservation*.