



Inside the Institute

Forestry Done Right: Precious Woods and the Future of the Amazon

Char Miller

At first I thought I was fighting to save rubber trees, then I thought I was fighting to save the Amazon rainforest. Now I realize I am fighting for humanity.

—Chico Mendes

Tasso Azevedo, the young and energetic director of the Brazilian Forest Service (BFS), loves to tell stories. Such as the pointed one he spun while we were hiking through a section of the Amazon rainforest, near Itacoatiaria, 180 km east of Manaus, capital of the Brazilian state of Amazonas. “Here is one of the cultural problems we face,” he told a group of international foresters attending *Megaflorestais’08*, an informal gathering of public land-agency leaders from around the world.¹ “Stand on a street corner in São Palo, and watch Brazilians react to two kinds of trucks. The first is a cattle carrier: everyone crowds around it, marveling over the animals’ beauty.” He paused. “The second is a logging truck; once spotted, everyone immediately flips open their cell phones to call the government to complain about deforestation.” Smiling, with a slight shrug of his shoulders and an evocative eyebrow lift, Tasso paused again: “What they don’t understand is that a cow is a sign of irreparable deforestation; the log is a sign of a renewable resource. They’re protesting the wrong thing.”

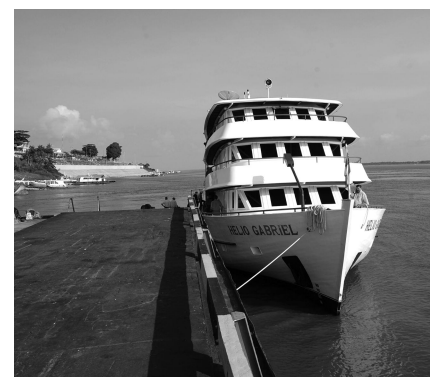
He is not the only head of a land-management agency battling against

common misunderstandings of what constitutes an environmental problem; he is not alone in trying to remind his diverse constituency that sometimes what it holds to be self-evident and true is neither. Yet the Brazilian experience is unique in this respect: its massive rainforests are disappearing at a bewildering clip; agricultural and grazing operations are the driving forces behind this devastation; and the carbon released as tens of thousands of forested hectares are cut down or go up in smoke has global significance in this age of climate change. Shifting public attitudes about the relative value of cows and logs, Tasso knows, would have a profound impact on whether his country can slow down, perhaps control, the speed by which its woodlands are converted to farmlands, pasture, or plantations.

That is his organization’s long-term ambition. In the short run, the BFS, which was founded in 2006 to combat deforestation and bring public lands under regulated management, must reach out to local communities, indigenous peoples, and an array of commercial entities to find common ground. It was on the property of one of these valued partners, Precious Woods-Amazonas (PWA), that we gained a first-hand look at what the future might hold for these venerable forests and the humans they have long have sustained.

On the Ground

“A chain saw is only a tool.” So argued Tim van Eldik, a Dutch forester who serves as PWA’s sustainability director, and has worked these lands since the company set up shop in the Amazon in the early 1990s; “our commitment to the triple-bottom line means we must make a more decent use of this tool.” He and his colleagues have done a good job of it, to judge from those applauding PWA’s integrative and consistent focus on economic development, environmental sustainability, and social justice. In 1997, for example, the Forest Stewardship Council certified Precious Woods’ operations, the first and largest forestry concern in Brazil to bears its coveted stamp of approval. Convinced too are the Tropical Forest Foundation, Ecological Society of America, Greenpeace In-



Helio Gabriel was *Megaflorestais 2008*’s floating home-base on the Amazon.

ternational, and the Rainforest Alliance; each of which has honored PWA's commitment to the principles of sustainability.

I knew of these honors when my colleagues and I disembarked from the *Helio Gabriel*, after a night-long cruise down the Amazon from Manuas to Itacoatiaria. But I was not prepared for what we encountered when, after a short bus ride from the dock, we stepped into the woods. We followed Tasso and Tim into the thick tangle of trees, walking along a narrow trail until we reached a small clearing. As Tim spoke of how PWA conducts a 100% inventory of all trees on its 150,000 ha; described the buffer zones it protects around riparian systems; explained how it fells, winches, skids, and transports logs to its adjacent mill; and detailed its chain-of-custody controls as part of its certification procedures, we but half listened. Not because we weren't interested. On the contrary, this voluble set of foresters in a babble of tongues was asking each other the question one finally blurted out loud: "when did you last harvest this section?" The answer: less than five years earlier. "Where are the skids? The stumps?" Tim smiled.

At that, people began scattering into the woods, looking for tell-tale evidence. They found little. This is partly the result of how quickly rainforests can regenerate if given the chance. Yet it was also clear from the minimal depth of the skids we could locate and the tiny holes in the canopy that were discernible, that PWA was honoring the agreement it negotiated with Greenpeace in 2000 to set "clear logging limits to guarantee that 85% of standing tree volume [would] always remain in the forest." I have never visited any site that has demonstrated so cleanly how to cut trees while preserving the integrity of the forest ecosystem.

I've never seen anything quite like PWA's mill, either. Oh, the saws emit-

ted the usual high-pitched whine; the sharp scent of fresh-sawed logs permeated the open-air shed, much as it does everywhere. But of sawdust I saw little. Every one of the saws had a hood which suctioned up the vast majority of the particulate matter; and what it did not capture settled down on a lengthy conveyor belt that ran beneath the building, joining all wood scraps, large and small, as it rumbled toward an ear-splitting shredder. Once ground down, the debris was blown into an incinerator whose heat powered a sophisticated, slick-and-clean generator.



An aerial view of the PWA mill and power-plant, Itacoatiaria, Brazil.

The nine-megawatt plant was built in 2005 to replace Itacoatiaria's old diesel-fueled generator, and now supplies most of the electricity the town's 70,000 residents consume while running the PWA mill. Because fuel is no longer trucked to Itacoatiaria (saving associated transportation costs as well); because biomass is now used in place of a fossil fuel; because methane gas buildup can be avoided by burning rather than stockpiling wood waste, the project is estimated to offset 1.4M tons of CO₂ over ten years. As such, it has qualified under the Kyoto Protocol's Clean Development Mechanism to sell carbon credits and in 2006 was approved for a total 512,385; these now account for roughly 30% of PWA's revenue stream. "Green smoke" pays.²

The "nonprofit" side of its ledger is just as compelling. In keeping with the company's commitment to social justice, it offers a living wage and a

pension plan to its employees; provides free meals and transportation to and from work; picks up the lion's share of its staff's medical-assistance needs; and makes available a range of other services and benefits. But as befits its conviction that it is one element in a wider human ecology, PWA has enmeshed itself in Itacoatiaria's cultural institutions, schools, and communal life. Innovative too is its employment of two, full-time social workers in the office of "Social Environment." Their job is to gauge and evaluate the company's long- and short-term impact on surrounding towns and villages; to partner with local governments and NGOs to help resolve pressing issues; and to liaise between public officials and an oft-dispersed citizenry. To look over the Venn Diagrams these professionals regularly produce from the face-to-face interviews they conduct annually throughout the region is to catch a glimpse of the complex social fabric that PWA promotes—its self-proclaimed role is "to empower the social capital in the local communities for their self-development"—and within which it is fully integrated.

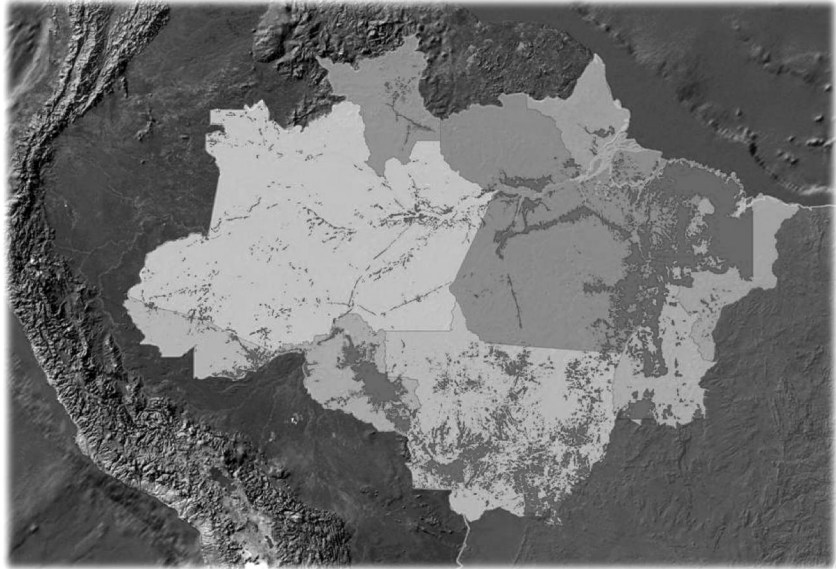
Crosscut

This description of PWA's business plan and corporate activism, I realize, sounds too good to be true. And there are downsides. Not least is that it is hard to figure out how its logging operations make any money. When asked about this during an information session, Tim acknowledged that its returns vary and can be low but reasserted that its economic goals were not just about making a profit but building a model of sustainable forestry. PWA's commitment to low-impact harvesting, while genuine and evident, nonetheless has an effect on the local biota. However careful the harvesting techniques, wildlife will be displaced, observed Manoel Francisco (Kiko) Brito, a noted Brazilian journalist who accompanied us on our tour: "mammals tend to flee an area

that is being logged, and can take a long time to return; the first ones to reappear are the herbivores,” and they are drawn back to the new clearings “full of grass or plant shoots, ideal for them to feed on.” Their predators stay away for a longer period of time, but not so certain insect populations, which rapidly recolonize the disturbed portions of the forest. These imbalances may well work themselves out over time, but how and to what degree is not yet known.³

Still, as Kiko notes, PWA’s intentions are noteworthy. Its harvesting methods preserve the canopy keeping “intact the ability of a forest to provide environmental services.” As confirmation of just how innovative this strategy is one need but read the commendation the company received from the Rainforest Alliance in 2004 when given the Corporate Sustainable Standard-Setter Award: “The Precious Woods Group caused what one expert calls “tectonic” change in sustainable tropical forest management. No other tropical operation changed more minds in the industry and the environmental community about the feasibility of the concept.”⁴


For all PWA’s virtues, it is but one actor in the Amazon; its sustainable harvests are the exception that proves the rule, as the preponderance of logging operations in the Brazilian rainforest is illegal. Indeed, the best guess is that 80% of timber felled there is off the books and conducted out of sight. According to the *Washington Post*, last year in the Amazon more than 4,600 square miles was deforested (for those keeping score at home, that’s more than twice the size of Delaware). Across this vast terrain, in which property rights are unclear, unemployment is sky high, and federal authority is minimal, even those lands that the central government has demarcated as national forests or national parks have been devastated. Consider the plight of Bom Futuro National Forest: of its 283,280 ha, upwards of 68,797 al-



Deforestation occurring throughout the Amazon basin. Photo courtesy of PWA.

ready have been cleared. “Here we don’t call it a ‘national forest,’” ranger Antonio Elson Portela told the *Post*: “we call it a ‘national grassland.’ We do not have any control.” So precarious is its existence that Bom Fortuno may be stripped clean within a decade.⁵

These intense pressures on public land speak to PWA’s central value, as model and bulwark. It offers a prospect of what could happen if other legitimate timber corporations operating in the Amazon adopted its guiding principles, in theory and practice. Moreover, because of the size of its holdings it helps block deforestation in its immediate vicinity; satellite images indicate that timber cutting throughout the region radiates from highways and rivers but diminishes markedly as it approaches PWA’s property. That’s why Tasso Azevedo emphasized that his under-staffed and under-financed agency could use many more allies like PWA.

His emphasis, in turn, is a sobering acknowledgement of just how much more work must be done to protect the imperiled Amazon. 

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Conservation and American Culture (Forest History Society), Gifford Pinchot and the Making of Modern Environmentalism (Island Press), and is editor of the just-released Water in the 21st-Century West (Oregon State University Press). In July, Miller became the director of the environment analysis program and the W.M. Keck Professor of Environmental Analysis at Pomona College.

Notes

1. For background on Megaflorestais, see: <http://www.rightsandresources.org/programs.php?id=82>; I have been fortunate to have attended the last two conferences; see Char Miller, “The Wolf is at the Door: Forests, Foresters, and Global Climate Change,” *Journal of Forestry*, January-February 2008: 5-6; and “The Changing Climate of Global Forest Management,” *Journal of Forestry*, in press.
2. “New Sustainable Forestry Model—Basis of Highly Profitable Business Segment for Precious Woods,” *Forest Trends*, 10 October 2006, http://www.forest-trends.org/resources/press/release_10-10-2006.htm (accessed February 21, 2009).
3. Manoel Francisco Brito to Char Miller, email communication, 22 February 2009.
4. Ibid; “14th Rainforest Alliance Gala Celebrates Sustainable Forestry,” <http://www.rainforest-alliance.org/news/2004/news91.html> (accessed February 22, 2009).
5. Joshua Partlow, “A Protected Forest’s Fast Decline,” *Washington Post*, 6 February 2009, A10.