

Department of Ecology and Evolutionary Biology, where Lisa Graumlich was her advisor. Andrea Lloyd is currently Assistant Professor in the Department of Biology at Middlebury College, Vermont. Lisa Graumlich is currently on leave of absence from the University of Arizona, and is serving as Deputy Director of the nearby Biosphere II and Director of the Earth Learning Center at Biosphere II.

William S. Cooper Subcommittee

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CORPORATE AWARD

Precious Woods, Ltd.

This year's ESA Corporate Award is given, for "Sustainability of Biological Resources in Terrestrial Environments," to Precious Woods, Ltd. in recognition of their work in developing science-based forestry practices to enhance sustainability of biological resources. They have used advanced planning for long-term management of rain forests, with innovative inclusion of ecological principles. They are developing a model for use by a large number of other companies that do not now participate in long-term planning or include ecological principles and concepts.

Professor Frank McCormick, of the Department of Ecology and Evolutionary Biology, University of Tennessee-Knoxville, nominated Precious Woods, Ltd. because of their efforts to manage for sustainable forest production 81,000 ha of "terra firma" in Amazonas, Brazil.

The forest management project began in 1992. The company's practices were certified as meeting requirements set up by the Rain Forest Alliance's Smart Wood Program. Since

1994, Precious Woods, Ltd. has set aside approximately 25,000 ha (30%) of their forest in permanent reserve to provide refugia for wildlife, sources for seed dispersal, and pollinators. They extended the Celos Management System, first developed and tested in Surinam. One harvest unit of approximately 2,000 ha is cut each year with a rotation cycle of 25 years. At any one time, 91% of the rain forest is in permanent or temporary reserve.

Species distributions of trees of dbh >50 cm are mapped with a Geographical Information System so that data can be entered into a forest growth model to estimate wood volume for future harvests. Some 40 tree species are used (the goal is to harvest 60 species) so as to: (1) minimize "high grading", (2) limit disturbances associated with timber harvesting, and (3) cut a reduced area of forest. No more than 80% of the reproductively mature trees of a species are removed in order to ensure a nearby source of seed for recruitment and to provide a continuous food supply for animals. Palms and other species that provide food and shelter for animals are also protected during the cutting. Gap size is minimized to enhance regrowth of shade-tolerant species.

Unlike other states in the Brazilian Amazon, 97% of the primary forest is said to still be present in the State of Amazonas. Precious Woods, Ltd. is the only forestry project to receive an "environmental license" from the State of Amazonas Secretariat for Environmental Science and Technology. The Governor recently stated that Precious Woods has done an outstanding job, which should serve as a model for further development of timber resources in this region. This is intelligent forest management that takes nature into consideration.

Corporate Award Subcommittee

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