
information crossfile

"Parks: How Big is Big Enough?" is the title of a Roger Lewin article in the Aug. 10, 1984 issue of *Science*. Lewin reports on "the world's most ambitious environmental experiment . . . designed to determine how best to protect the dwindling habitat resources that remain" in the Amazon forest.

"A fair number of studies have addressed the problem of ecosystem decay," Lewin writes, "but none has been prospective. The great strength of the 'minimum critical size of ecosystems project,' as the Brazilian-U.S. venture is called, is that it is the first time the effects of fragmentation and isolation will have been closely observed throughout the decay process."

The project is co-directed by Thomas Lovejoy, World Wildlife Fund scientist, and Herbert Schubart of Brazil's National Institute for Amazon Research. Lovejoy conceived the idea in 1976, when ecologists were arguing over application of the island biogeography theory to the design of ecological refuges. According to Jered Diamond, UCLA ecologist, the project is "beautifully designed. It is unique in human history."

Two separate but unrelated questions in establishing minimal critical size for a rain forest habitat are (1) Are species lost in some sort of predictable order? and (2) Will forest fragments of similar size end up with similar final species compositions? Another concern was size — a matter that was "the focus of most folks' minds" at first; events, however, forced attention to be turned to the phenomenon known as the edge effect. Lovejoy describes a series of systematic studies aimed at determining the magnitude of the edge effect.