

Response to Baidya Roy *et al.* 2005. “Can Logging in Equatorial Africa Affect Adjacent Parks?”

Potential Methodological Flaw in the Examination of the Effects of Logging

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In their paper, Baidya Roy *et al.* (2005) conclude that: “Our simulations suggest that extensive logging in the timber concessions in western equatorial Africa could affect the rainfall in adjacent national parks and other protected areas.” Using sophisticated climate modeling procedures, the authors argue their case convincingly, and I cannot but agree with their statement: “It is therefore important to assess the potential impact of logging on the regional climate as a whole.” However, their results are totally flawed by the methodological choice to assimilate logged-over forests to grasslands in the logging concessions of Gabon and the Republic of Congo. Clearly, logging activities create some disturbances and disruptions in the ecosystem: roads are opened, trees are felled, heavy machinery moves in and out the forest, access is increased, and with it, hunting pressure increases, etc. (e.g., see Grieser-Johns 1997, Fimbel *et al.* 2001, or Hall *et al.* 2003 for reviews on the impacts of logging). Logging is therefore not a benign activity. However, logging in Central Africa is highly selective, removing generally less than one tree per hectare for average wood productivity of 5–6 m³/ha (Estève 1983, Jonkers 2000). The residual logged-over forest is therefore still a dense forest with an average canopy cover more than 75–80% and not grassland! This should be clearly acknowledged by the authors, because I suspect that it would have a tremendous influence on the results of their simulations.

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