

year) are acidic, compared with 14% of the Adirondack lakes (median wet sulfate loading of 29 kilograms per hectare per year) (5). Forest regrowth and other changes in land use also affect the acid-base chemistry of surface waters, but they cannot account for the observed pattern of recent acidification (6).

Most of the acidic surface waters in low deposition areas (such as the Amazon's Rio Negro basin) in papers cited by Krug and Warnick are highly colored systems that would fit into our organic-dominated category (5). Acidic waters with low dissolved organic carbon concentrations are rare in low deposition areas, occurring only in association with geological sources of sulfate (for example, with geothermal springs or acid mine drainage) and possibly in conjunction with extreme marine salt influence (5).

After 10 years of intensive acidification research, the conclusion that acidic deposition causes surface water acidification can scarcely be called "speculative." Regional chemical analysis, paleolimnological studies, experimental watershed studies, and geochemical theory all support our conclusion that acidic deposition has caused acidification of many U.S. lakes and streams (7).

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1336

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REFERENCES

- 1. B. F. Cumming et al., Can. J. Fish. Aquat. Sci., in press.
- 2. T. J. Sullivan et al., Nature 345, 54 (1990).
- D. F. Charles, R. W. Battarbee, I. Renberg, H. van Dam, J. P. Smoll, in Acidic Precipitation, vol. 4, Soils, Aquatic Processes, and Lake Acidification, S. A. Norton, S. E. Lindberg, S. L. Page, Eds. (Springer-Verlag, New York, 1989), pp. 207-276; M. Havas, T. C. Huthinson, G. E. Likens, Environ. Sci. Technol. 18, 176A (1984).
- M. R. Church et al., Direct/Delayed Response Project: Future Effects of Long-Term Sulfur Deposition on Surface Water Chemistry in the Northeast and Southern Blue Ridge Province (EPA/600/3-89/061a-d, Environmental Protection Agency, Washington, DC, 1989).
- L. A. Baker, P. R. Kaufmann, A. T. Herlihy, J. M. Eilers, *Current Acid-Base Status of Surface Waters*, Report 9, NAPAP, State of Science and Technology (National Acid Precipitation Assessment Program, Washington, DC, 1990).

- T. J. Sullivan, Historical Changes in Surface Water Acid-Base Chemistry in Response to Acidic Deposition, Report 11, NAPAP, State of Science and Technology (National Acid Precipitation Assessment Program, Washington, DC, 1990).
- 7. NAPAP Integrated Assessment: Questions 1 and 2, External Review Draft (National Acid Precipitation Assessment Program, Washington, DC, 1990).

Faux Pa

Imagine my surprise to see a photograph of Louis Leakey in ScienceScope (16 Aug., p. 727) captioned "Would Richard Leakey have sided with the biologists or the social scientists?" If you really want to know what Richard thinks about anything, just ask him. If, however, you are referring to his famous father, who is deceased, the answer to the question is of course debatable.

More to the point, Mary Leakey, Richard's equally famous mother, is very much alive. Her views about the merits of a proposed National Science Foundation directorate for the social sciences are certainly as informed by experience and knowledge as those that Louis Leakey might have expressed.

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> > SCIENCE, VOL. 253