

Global biodiversity plan needs to convince local policy-makers

Sir — The symposium of eminent ecologists¹ that backed the Conservation International (CI) blueprint to save global biodiversity (covering protection of biodiversity hotspots² and tropical wilderness areas) concluded that ecological criteria can be used to set global conservation priorities, and that “all conservation must be driven by what a country’s people want, not by what developed nations impose from outside”³. The degree to which development priorities of target countries are consistent with the CI blueprint will therefore determine its efficacy.

Two of the 25 global hotspots and one of CI’s three focal wilderness areas (New Guinea) cover Indonesian territory. During 1999, I surveyed 125 professionals living in Indonesia and active in development of national biodiversity policy. Based on pilot surveys, I formulated seven questionnaire statements on biodiversity policy and asked respondents to mark the two issues that concerned them most and the two that concerned them least. The response rate was 84% (Indonesian, 74; expatriates, 31). Full details of the survey can be found at <http://www.geog.ox.ac.uk/research/bie/papers/indosurvey.pdf>.

In descending order of concern, the score for each statement is as follows: (1) creating responsible use of land and renewable natural resources to provide quality and sustainable livelihoods (most concern 45; least concern 14); (2) developing informed and rational planning and decision-making (39; 17); (3) maintaining the ecological processes, services and benefits that underpin human activity (31; 10); (4) empowering local communities in natural resource management (30; 34); (5) conserving species and habitat diversity (20; 18); (6) ensuring that weaker communities do not suffer the effects of environmental degradation created by more affluent sectors of society (17; 50); and (7) preserving native forests and other wild places (11; 32).

The CI blueprint closely reflects the issue statements ranking fifth (biodiversity hotspots) and last (wilderness areas). This suggests that CI will need to invest substantially in efforts to convince biodiversity policy-makers in Indonesia that they want its blueprint.

The management of natural resources is likely to be a key issue in the public

debate on the future shape of Indonesia as a nation state, on account of the widely held view that the autocratic Suharto regime (1966–98) plundered natural resources.

At first sight, a promising approach for CI might be to advocate synergistic linkages between its own agenda and the two highest-ranking concerns in my survey — sustainable development and rational decision-making. This is the vision of the critical ecosystem partnership fund recently launched by CI together with the World Bank and the Global Environment Facility⁴.

However, just such an approach has been pursued in Indonesia since the early 1980s, with little gain for biodiversity conservation⁵. This is because major threats to biodiversity derive from large public and private investments, not the local communities who are the focus of concern of Indonesian policy-makers and international donor assistance.

A second obstacle to the CI blueprint is the fact that ‘wilderness’ protection is largely a North American concept, alien to Indonesians.

Ecologists do not doubt the urgency and importance of conserving species and tropical wilderness areas. CI’s initiative is therefore welcome. However, translating the blueprint into action will require that policy-makers in targeted regions give CI’s ecological goals higher priority than is currently the case in Indonesia, where scientific and economic arguments for species conservation have had limited impact on the ground.

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1. Dalton, R. *Nature* **406**, 926 (2000).
2. Myers, N., Mittermeier, R. A., Mittermeier, C. G., da Fonseca, G. A. B. & Kent, J. *Nature* **403**, 853–858 (2000).
3. www.defyingnature.org (accessed 9 November 2000).
4. www.cepf.net (accessed 23 October 2000).
5. Wells, M. *et al. Investing in Biodiversity* (World Bank, Washington DC, 1999).

Is this the first portrayal of tool use by a chimp?

Sir — We recently took part in the Royal Society’s New Frontiers in Science 2000 Exhibition, presenting an exhibit based upon our report in *Nature* of extensive cultural variation in tool use and other behaviour in wild chimpanzees¹. The primary aim of this annual exhibition is to communicate the work of scientists to the public, but we found information flowed in both directions.

Of particular note, following the appearance of the exhibition at the Royal



Society of Edinburgh, was that Peter Sharp drew our attention to a Liberian postage stamp that was issued in 1906 (see above).

Although primatology appears to have been unaware of it, the image may be the earliest accurate depiction of tool use in chimpanzees (perhaps in any animal), antedating by at least half a century the photographic records that later illustrated the first systematic scientific accounts of such behaviour, published in *Nature* by Jane Goodall².

By contrast with earlier depictions, the image is remarkably correct in overall anatomy and posture, including knuckle-walking with the left hand and plantigrade positioning of the feet. Approaching a termite mound (*Macrotermite*, probably *Macrotermes*), the chimpanzee wields a stout stick of the dimensions later documented as associated with digging into such mounds to access the termites^{3,4}. We know of no scientific report of termite-digging for Liberia.

The basis on which the image was composed remains unknown.

Michael Harvey of the philatelists Stanley Gibbons Limited has identified the stamp as one of a set printed in London by Perkins Bacon, a now defunct company. The stamp appeared as an illustration in *Liberia* (1906), by the naturalist and philatelic illustrator, Sir Harry Johnson, but no clues to the origin of the image appear there, nor in two earlier volumes he drew on heavily^{5,6}. Thus, the trail has gone cold.

Any assistance from your readers in tracing the origins of this scientifically intriguing image will be gratefully received.

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1. Whiten, A. *et al. Nature* **399**, 682–685 (1999).
2. Goodall, J. *Nature* **201**, 1264–1266 (1964).
3. Jones, C. & Sabater-Pi, J. *Nature* **223**, 100–101 (1969).
4. McGrew, W. C. *Chimpanzee Material Culture: Implications for Human Evolution* (Cambridge Univ. Press, Cambridge, 1992).
5. Büttikofer, J. *Reisebilder aus Liberia* (E. J. Brill, Leyden, 1890).
6. Dapper, O. *Description de l'Afrique* (Chez Wolfgang, Waesberge, Boom & van Someren, Amsterdam, 1686).