Caribbean hot spot

SIR — There are no natural forests remaining in Haiti, apart from a few isolated patches, and the total forest cover is below one per cent^{1,2}, making Haiti's forests among the most severely depleted ecosystems on Earth. By comparison, forest cover in tropical Central and South America averages 27 and 44 per cent respectively². Haiti's neighbour on Hispaniola, the Dominican Republic, is in slightly better ecological shape, but many Haitian species are found only in Haiti³, and mass extinctions of plants and animals are likely to occur in the next few years in Haiti unless measures are taken.

The growing human population of Haiti (7 million), and its demands on resources, is the long-term problem that must be addressed. But the immediate concern is the felling of trees, primarily for the production of cooking fuel (charcoal). Alternative sources of energy need to be found if the little remaining forest is not to be exhausted. Many species still exist in these small areas of remnant forest^{3,4} and many can be saved if there is prompt action to slow or halt the deforestation. We propose the following action:

(1) Funding for biological conservation by the US Agency for International Development (USAID) in Haiti, cancelled as a result of the *coup d'état* and subsequent OAS embargo, should be resumed and increased. Priority should be given to preserving biological diversity in the remaining pockets of forest cover, mostly



Recent estimates of human population density and forest cover in the Greater Antilles, with comparable estimates in Central and South America^{1,2,6,7}. located in or near the existing national parks, and finding alternative sources of energy for the local inhabitants.

(2) The World Bank Forestry and Environmental Project, suspended at the time of the *coup*, should be reinstated. This project was designed to upgrade the Service for the Protection of the Environment in Haiti, rebuild the infrastructure of the Ministry of Agriculture associated with the protection of biodiversity and initiate a training programme in natural resources and wildlife.

(3) The University of Les Cayes, near the last remaining areas of natural forest, should develop a curriculum in the stewardship of natural areas. The national parks at Pic Macaya and Morne La Visite could be the 'living laboratories'.

(4) A private, non-governmental organization should be established to serve as a clearing house for information on natural history and conservation, thus ensuring that this information is available to other similar organizations, international donor programmes and the government of Haiti. (5) A strong programme in environmental education should be established.

If these steps are taken immediately, the pending mass extinctions in Haiti may be delayed or even prevented. The infrastructure is in place, and studies to establish the programmes have been carried out⁵. International donor agencies such as USAID must resume their support for environmental programmes in Haiti. Even if the political situation remains confused and controversial, four of these five programmes could be implemented. Only the World Bank Project depends on negotiations with a stable, internationally recognized government of Haiti.

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- Paryski, P., Woods, C. A. & Sergile, F. in *Biogeography of* the West Indies: Past, Present, and Future (ed. Woods, C. A.) 855–878 (Sandhill Crane, Gainesville, Florida, 1989)
- 2. World Resources Institute. *World Resources* 1992–93 (Oxford University Press, New York, 1992).
- Woods, C. A. & Ottenwalder, J. A. *The Natural History of Southern Haiti* (Special Publ. Florida Mus. Nat. Hist., Gainesville, Florida, 1992).
- Hedges, S. B. Biodiversity and Conservation 2 (in the press).
- Woods, C. A., Sergile, F. & Ottenwalder, J. A. Stewardship Plan for the National Parks and Natural Areas of Haiti (Florida Museum of Natural History, Univ. Florida, Gainesville, Florida, 1992).
- Caribbean/Central American Action. Caribbean and Central American Databook (Caribbean/Central American Action, Washington, DC, 1990).
- Johnson, T. K. Biodiversity and Conservation in the Caribbean: Profiles of Selected Islands (International Council For Bird Preservation, Cambridge, 1988).

Grant policy

SIR — Your article (*Nature* **363**, 4; 1993) "Wolfson Foundation's policy on animals angers other British medical charities" stated that the Physiological Society "would accept the foundation's argument" in not supporting intercalating medical and dental students who do research projects on experimental animals. We have decided for the time being not to pursue the matter, but we do not agree with the Wolfson's policy.

The society believes that the use of experimental animals is vital for progress in medical research. It also believes that the intercalated year is an important first step in the training of doctors and dentists for research. The trustees of the Wolfson Foundation plainly have the responsibility for setting their own policy. Over the past few years, they have taken an important and welcome lead in supporting intercalating studentships. However, we believe that their policy on projects involving experimental animals is regrettable and mistaken.

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Minister's boson

SIR — So Britain's cabinet minister for science wants to hear from scientists who can explain on a single sheet what the Higgs boson is (*Nature* **362**, 781; 1993)! No doubt this herculean challenge will keep British physicists busy for some time. For what chance of success do they have in attempting such simplification of science?

And why do politicians on this side of the Atlantic nearly always demand that scientists demonstrate the value of scientific research year after year - this is really what they mean by simplification and popularization - when we ask for continued financial support? Many cogent studies and arguments have shown the economic and social benefits of scientific research, including Retrospectroscope: Insights into Medical Discovery by J. H. Comroe Jr (Von Gehr Press, 1977). This book still offers an excellent insight not only into "how to get the most for the medical research dollar" but also for the general research pound, franc, lira and so on. Regrettably, I am unable to recommend the book to the Irish minister of science; the office was abolished following the recent general election; it is now technology only and our science grant was cut by more than IR£4 million in the February budget.

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