house gas concentrations at less than double preindustrial levels. This target makes sense both in terms of an environmental "Hippocratic Oath," not to do harm, and in terms of achievable levels of emissions reduction on long-term technical, social, and demographic grounds. Kinzig and Kammen (*1*) present a detailed analysis of the possible transitions from the current path of runaway greenhouse gas emissions to these low-emission scenarios. Neither the rate of reductions needed nor the eventual targets are significantly affected by population.

Furthermore, we see no evidence that an equal per capita allocation would provide incentive to significantly alter national population growth. In fact, the climate-demographic interaction could help reduce population growth rates through increased investments (including those in health and education) that might be made possible by sales of emissions permits by developing nations under a per capita allocation scheme. In any case, we suggested in our Policy Forum possible solutions to any appearance of incentives for governments to adversely alter their population policies in response to per capita permit allocations. This can be achieved, for example, by choosing a fixed base-year population, by determining for each country a population baseline incorporating reasonable declines in population growth, or by allocating permits according to the population at some previous time point, for example, 20 years ago.

The concept of emissions rights proportional to land area suggested by Westing would result in enormously unequal allocations—an Australian would have many times the rights of a Fijian—without any justification other than the historical accident of national borders. The atmosphere is well mixed, and individuals are not physically restricted from accessing it as a sink; allocating its capacity proportional to land area makes no more sense than allocating rights to the deep ocean or Antarctica proportional to land area (both of which are governed for the good of all humanity under international law). In contrast, we argue that per capita allocations are justified by a common-sense principle of equality: that no one's basic rights should be contingent on their place of birth.

At a larger level, the collapse of the negotiations at the sixth Conference of the Parties to the U.N. Framework Convention on Climate Change in The Hague last November highlights a lack of understanding of the scope and importance of the climate issue and of the opportunities that exist to take positive first steps. Political leadership has proved, so far, to be lacking. In this vacuum, we believe that a consensual ethical principle—such as our proposal of environmental equity—is necessary to revitalize efforts to build an agreement.

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1. A. P. Kinzig and D. M. Kammen, *Global Environ. Change* **8** (no. 3), 183 (1998).

Letters to the Editor

Letters (~300 words) discuss material published in *Science* in the previous 6 months or issues of general interest. They can be submitted by e-mail (science_letters@aaas.org), the Web (www.letter2science.org), or regular mail (1200 New York Ave., NW, Washington, DC 20005, USA). Letters are not acknowledged upon receipt, nor are authors generally consulted before publication. Whether published in full or in part, letters are subject to editing for clarity and space.

Safety of Low-Cyanide Cultivars

WE ARE GRATEFUL THAT AFRICA'S NEEDS ARE on the agenda (Editorial, "Helping Africa feed itself," G. Conway and S. Sechler, 8 Sept., p. 1685). Yet, regarding V. S. Palmer and coauthors' plea in their letter (29 Sept., p. 2281) suggesting an international effort to rid cassava of cyanide as a dangerous toxin, I fear they are mistaken. From my experience (I chaired a session of 60 African scientists at the International Institute of Tropical Agriculture on the topic, and I teach about 100 new students each year and interact with many peasant farmers on their plots), many Africans say that the low-cyanide cultivars are safe with the normal cooking and food preparation methods used traditionally and that, if cyanide content were further reduced or removed, then they would lose their crop to baboons, porcupines, and a host of insects. I have run breeding field trials where the baboons have sampled the goods and left only the low-cyanide lines.

Cassavas: It's in how you cook them.

Cassava has great potential, especially if viruses are periodically eliminated by means of tissue culture cycles, which triples crop yields. The greatest need at the moment is for virus-resistant and mealybug-resistant cassava, which could be developed by genetic modification of locally popular lines.

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Einstein's Motivation

"EINSTEIN'S INTELLECTUAL FEAT WAS ESPE-cially astonishing because, unlike the pioneers of quantum theory, he wasn't motivated by any experimental enigma." After I read this comment by Martin J. Rees in his Pathways of Discovery essay "Piecing together the biggest puzzle of all" (8 Dec., p. 1919), I searched and found that, contrary to what Rees says, Einstein was indeed motivated. Einstein wrote that he was "busy working on relativity theory in connection with the law of gravitation, with which I hope to account for the still unexplained secular changes in the perihelion motion of the planet Mercury—so far it doesn't seem to work" (*1*, p. 3).

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1. Letter to Conrad Habicht, December 1907, cited in L. P. Hughston and K. P. Tod, *An Introduction to General Relativity* (Cambridge Univ. Press, Cambridge; New York, 1990).

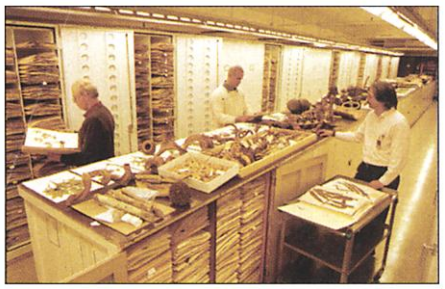
Museum Collections and Conservation Efforts

THE VIEWS ABOUT BIODIVERSITY DATABASES discussed in the Bioinformatics for Biodiversity special issue (29 Sept., pp. 2305–2314) and subsequently in the 15 December Letters section emphasize that the range of such catalogs must be broad to be of maximum utility for taxonomists as well as conservationists. However, some of the discussions seem to imply that museum scientists are the custodians of an attic filled with historical biodiversity data that are not adequate for addressing contemporary conservation issues.

At the National Museum of Natural History, we add about a half-million new specimens of plants and animals each year from areas that have been little explored and from habitats of prime conservation concern. If this number is multiplied by the number of museums and botanical gardens worldwide,

CREDIT: SYLVAN WITTWER/VISUALS UNLIMITED

the annual total amount of new biodiversity data is staggering. The collections not only document the past, but also provide a continuous record of the contemporary status of biodiversity (*1*). Data preserved in these collections can be used effectively only if fully cataloged, as elegantly mandated by Edward O. Wilson in his Editorial in the special issue (29 Sept., p. 2279).



CREDIT: CHIP CLARK, NATIONAL MUSEUM OF NATURAL HISTORY

A glimpse of some of the plant specimens catalogued at the National Museum of Natural History.

In their letter (15 Dec., p. 2073), Andrew Smith and colleagues correctly praise the new Species Information Service of the IUCN–World Conservation Union that is intended to provide conservationists with continuously updated biodiversity data supplied by "species specialists" and "experts." However, most of these specialists are housed in museums around the world and derive their expertise from studying the historical and contemporary collections in these very institutions. The value and multiple uses of voucher specimens (which serve to verify the geographic distribution of species) are often overlooked (*2*).

It is time that conservationists become committed partners with museum scientists to provide the most reliable, verifiable, and accurate data for making conservation decisions. Natural history research based on documented collections provides the type of good science from which conservation activities will greatly benefit.

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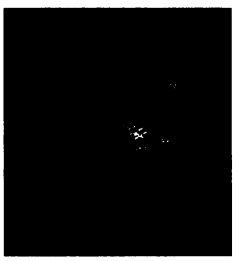
1. H. B. Shaffer, R. N. Fisher, C. Davidson, *Trends Ecol. Evol.* **13**, 27 (1998).
2. L. A. Ruedas J. Salazar-Bravo, J. W. Dragoo, T. L. Yate, *Molec. Phylogenet. Evol.* **17**, 129 (2000); M. de L. Brooke, *Trends Ecol. Evol.* **15**, 136 (2000).

CORRECTIONS AND CLARIFICATIONS

THIS WEEK IN SCIENCE: "Breaking and entering" (5 Jan., p. 11). The image that accompanied this description of research by M. M. Mota *et al.* was incorrect. A correct one, showing evidence of a malarial sporozoite having wounded a host cell membrane, is presented here. The image in the 5 January issue was of migrating border cells in *Drosophilia*, associated with the research of P. Duchek and P. Rørth described in the same issue under the item "A migration signal."



NETWATCH: "A century of ecology journals and *Science*" (15 Dec., p. 2027). The JSTOR online archive of *Science* goes back to the first issue of *Science*, which was published in 1880, not 1895 as stated.

NEWS FOCUS: "'Sir Mammoth' leads charge to uncover ice age fossils" by R. Stone (15 Dec., p. 2063). In this profile of Dirk Jan Mol, he was incorrectly described as the oldest of nine children. He is the eighth of nine children.