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require many millions of hectares and massive long-term commitments (3).

In relation to declining rates of deforestation, the uncertainty about rates of deforestation is such that it is difficult to specify recent trends. Globally, the rate of deforestation in the 1990s is about the same as it was in the 1980s (4). Intact forests are large reservoirs of, and in many cases sinks for, carbon. Thus, reducing deforestation and maintaining the functional integrity of extant forests are probably the biggest near- to mid-term contributions that forestry management could make toward improving the carbon balance of the terrestrial biosphere.

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- State of the World's Forests 1997 (United Nations Food and Agriculture Organization, Rome, 1997).

I want to commend Moffat for her article on carbon sequestration through forest regeneration and Daniel H. Janzen on his timely letter (15 Aug., p. 883) regarding the need to internalize environmental costs and create socioeconomic forces that will motivate people to sequester carbon through reforestration. However, the reforestration sequestration strategies seem to be attempts to capture the horse, so to speak, after it has left the barn.

I want to put in a plug for a carbon mitigation strategy that seems to get overlooked when environmental scientists and policy-makers get together to develop carbon mitigation strategies—the substitution of hydrogen for carbon as the preferred global chemical energy carrier: in other words, creating a hydrogen economy.

Hydrogen is now a clean, safe, and efficient energy carrier (1). The technology and equipment needed to convert primary energy sources (whether biomass, fossil, nuclear, geothermal, hydro, or solar) to hydrogen fuels are available from a wide variety of manufacturers. The only significant barriers to widespread market penetration of hydrogen energy systems are economic: cost and custom. As Janzen notes, the energy consumer does not usually pay for pollution, and thus has no incentive to think about cleaner energy, let alone actually use more efficient technologies, such as hydrogen fuel cells. David E. Bruderly

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I would like to call attention to another possible carbon sink: the calcareous algae (Corallinaceae) that cover large extensions of sea platform in many regions of the world and so far have been overlooked by many geochemists. Over 90% of the thallus of the calcareous red crusts is composed of carbonates, accumulated by these algae to deter herbivores (1). Along the Brazilian coast, for instance, the stocks are estimated to be around 2  $\times$  10<sup>11</sup> metric tons (2), which corresponds to about 45 gigatons of carbon dioxide. The residence of this carbon is certainly much longer than that of carbon fixed in forests, because it is not metabolized and remains buried under successive layers of calcareous crusts. There are commercial companies interested in the exploitation of the Brazilian beds of calcareous algae, mainly to be used to balance acidic soils, but this use would decrease the retention time of the carbon in this sink.

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# **Assigning Credit**

In an editorial about scientific ethics (18 Apr., p. 335), one of us (C.K.G.) argues the need to assign proper credit for authorship. The celebrated Luria-Delbrück paper (1) on

the origin of mutations is cited as an exemplary model because of a footnote to the title that reads, "Theory by M.D., experiments by S.E.L." Ironically, this turns out to be a flawed example; nevertheless, it proves the rule.

In a conversation with one of us (I.T.) around 1959, Luria regretted that footnote and attributed the wording to an editor. Because the experiments were completely theory driven, the words and their order in the footnote could easily mislead a reader to think that it was Delbrück who initiated the study and that Luria's role was merely to perform the obvious experiments. In fact, it was Luria who conceived of the key idea, which was to contrast the clonal with the Poisson mutant distribution.

Luria's autobiography (2) is explicit: the idea of the fluctuation test occurred to him while at a faculty party at Indiana University on a Saturday night, and by the following Tuesday afternoon he designed and performed the experiments, and found the results predicted by the genetic model. At this point, he consulted Delbrück, who soon converted Luria's intuitive theory into a more rigorous mathematical form and who thus made his essential contribution to the study.

In its novel way, this story confirms the importance of assigning proper credit.

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## **Corrections and Clarifications**

- The lower illustration in the article "A living fossil is dethroned" by Wade Roush (Research News, 5 Sept., p. 1436) showed a coelacanth. It should have shown a lungfish.
- The article "Reseeding the Green Revolution" by Charles Mann (Special News Report, 22 Aug., p. 1038) referred incorrectly to UNESCO in the sixth line. The reference should have been to "UNICEF," the United Nations International Children's Emergency Fund.

The editorial "Of timeliness and timelessness" by E. Rubinstein (22 Aug., p. 1019) should have mentioned (in the last sentence of the fourth paragraph) "Academic Press journals" (not Associated Press).

- The letter "Corn genome initiative" by M. E. Sorrells (15 Aug., p. 884) should have mentioned (in the first column on page 885, line 14 from the top) "the National Research Initiative" (not the National Rice Institute). Science regrets the error.
- The table of contents in the issue of 7 March (under the heading "Letters," p. 1390) should have included, as the last item, "The Cause of Obesity: P. Södersten."

### Letters to the Editor

Letters may be submitted by e-mail (at science\_letters@aaas.org), fax (202-789-4669), or regular mail (*Science*, 1200 New York Avenue, NW, Washington, DC 20005, USA). Letters are not routinely acknowledged. Full addresses, signatures, and daytime phone numbers should be included. Letters should be brief (300 words or less) and may be edited for reasons of clarity or space. They may appear in print and/or on the World Wide Web. Letter writers are not consulted before publication.



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