year, which is equivalent to 0.8% of the 1990 CO_2-C emissions from the same geographical area. The net carbon sequestration is modest compared with other scenarios such as woodland regeneration (*1*, *2*), reestablishing pasture (*6*), or no-till (*7*, *8*) but is, nevertheless, positive relative to the 1990 baseline.

Schlesinger's plea for full carbon accounting when assessing carbon mitigation options is well made, but his comment that manuring has no application for net carbon sequestration does not hold if one considers manure as an agricultural by-product and assesses changes in manuring practice relative to a Kyoto baseline.

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*IACR-Rothamsted receives grant-aided support from the Biotechnology and Biological Sciences Research Council of the United Kingdom.

References and Notes

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3. Total manure production was calculated from 1990 figures for the total number of cattle and pigs from *Eurostat, Agriculture Statistics Yearbook, 1995, Theme 5, Series A* (Commission of the European Communities, Luxembourg, 1995), and per capita manure production figures were calculated from the Ministry of Agriculture, Fisheries, and Food, *Fertilizer Recommendations for Agricultural and Horticultural Crops* (RB209, HMSO, ed. 6, London, 1994).
4. Assuming an even distribution of manure to arable and nonarable agricultural land.
5. P. Poulton, in *Evaluation of Soil Organic Matter Models Using Existing, Long-Term Datasets*, D. S. Powlson *et al.*, Eds. (Springer-Verlag, Berlin, 1996), pp. 376–384.
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7. P. Smith *et al.*, *Global Change Biol.* **4**, 679 (1998).
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Response

Smith and Powlson maintain that increases in SOM on manured arable land should count as a net sequestration of carbon in terms of the Kyoto Protocol. I would also support this view, if manuring led to an increase in the total carbon inventory in the soils of a nation between 1990—the Kyoto baseline year—and some point in the future. There is no doubt that arable soils receiving manure will gain SOM, but a full accounting must also consider the continuing losses of SOM from the lands used to produce silage for livestock. As long as cattle are heterotrophic, it seems unlikely that they will increase the net storage of carbon in the landscape.

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CORRECTIONS AND CLARIFICATIONS

In the News Focus article "The elusive causes of childhood cancer" by Jocelyn Kaiser (3 Dec., p. 1833), the mutation in the gene *MLL-AF4* occurs in adult and child cancer patients who have received treatment with chemotherapy drugs that inhibit topoisomerase II, not in infants whose mothers were treated with such drugs during pregnancy. In the fourth paragraph, the triggered mutation in an "unidentified gene" is a deletion in the other copy of the *TEL* gene. And the unchallenged immune system of young children should have been described as "naïve," not as weakened or frail. In the fifth paragraph, the immunological benefits to infants of long-term breast feeding may be due to antibodies during the first month, but thereafter seem to be due to transfer of other factors such as antibacterial proteins, immune cells, and microbial organisms. It is not known, however, which of these factors is important in the context of protection from leukemia. Lastly, Frederica Perera's first name was misspelled.