

# SCIENCE NEWS®

The Weekly Newsmagazine of Science

A Science Service Publication  
Volume 136, No. 24, December 9, 1989

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Subscription Department  
231 West Center Street, Marion, Ohio 43305

Subscription rate: 1 yr., \$34.50; 2 yrs., \$58.00.  
(Foreign postage \$6.00 additional per year.) Change of  
address: Four to six weeks' notice is required. Please  
state exactly how magazine is to be addressed.  
Include zip code. For new subscriptions only call  
(1) 800-247-2160. Printed in U.S.A. POSTMASTER:  
Send address changes to Science News, 231 West  
Center Street, Marion, OH 43305. Second class  
postage paid at Washington, D.C., and additional  
mailing offices. Title registered as trademark U.S. and  
Canadian Patent Offices. Published every Saturday by  
SCIENCE SERVICE, Inc., 1719 N St., N.W.,  
Washington, D.C. 20036. (202-785-2255)  
ISSN 0036-8423

## Letters

### The significance of facts

Timothy Kohchi (Letters, SN: 10/7/89, p.227) challenged the "moderate" tone of your reporting on the environment. I was pleased that your response is that your duty is to report scientific findings and their implications as accurately and fairly as possible. Advocacy belongs elsewhere. The greatest contribution you can make to intelligent advocacy in sensitive areas like medicine and the environment is to provide a reliable technological basis on which all sides can essentially agree. A sound fact basis will help tame the nature of the advocacy and increase the possibility of adopting effective solutions and making reasonable tradeoffs.

Unfortunately, the objective reporting of testing where there is weak correlation or incomplete data can lead some readers to unsound inferences. It would be helpful to include some assessment of statistical significance in such reports.

Lloyd McAulay  
New York, N.Y.

### This Week

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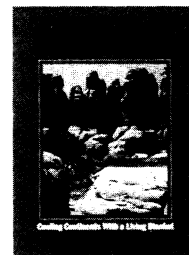
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Cover: The early Earth was too hot to support most forms of land life until microbes blanketed the continents and helped cool the planet, according to a scenario proposed by two geoscientists. Microbial soils still thrive in many places around the world, including the Utah desert pictured here, where they form the dark crust visible in the foreground. (Photo: Susan E. Campbell)



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### Tree-lined interstates

Nancy Irving's idea to help offset the greenhouse effect by planting trees along super-highway medians (Letters, SN: 10/7/89, p.227) is a good one, but implementing an idea is sometimes more difficult than having it.

Back in the 1970s, when I first read in SCIENCE NEWS of the possible global warming due to the burning of so much fossil fuel, I offered my services free to the State of Virginia to plant trees along a 30-mile stretch of interstate. A state official informed me that I could plant trees there only if I represented a Scout troop, garden club or similar organization. Later I made the same type of offer to North Carolina, but was again turned down because that state already has a program for planting trees, and possibly shrubs, along certain highways, financed by the sale of personalized car tags.

But times change. Because of so much public interest in the greenhouse effect, a consortium of 16 senators is now proposing plans to stop it. And just this fall, President Bush suggested to Peace Corps members in

Sioux Falls, S.D., that trees be planted along interstate highways as part of a national volunteer tree-planting program. Perhaps spontaneous individual desires to help save our planet will be more easily accommodated these days.

A.P. Sabol  
Louisburg, N.C.

Nancy Irving's proposal seems attractive at first glance, but it should not be forgotten that the medians and ditches of our interstate highway system are devoid of woody growth as a result of specific planning and for good reason. A vehicle that careers off the roadway into a grassy area sustains considerably less damage and occupant injury than one that slams into a tree. Vehicles leaving the roadway seldom penetrate beyond the outer boundaries of the interstate system, and many people going about their business today can be thankful that someone planned for

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# Ernst Mayr

## TOWARD A NEW PHILOSOPHY OF BIOLOGY

*Observations of an Evolutionist*



Harvard U. Press, 1988, 564 pages, 6 1/2" x 9 1/2", paperback, \$14.95  
ISBN 0-674-89666-1

In this beautifully presented book, Ernst Mayr, a professor emeritus of zoology at Harvard, argues that biologists must heed the analyses of philosophers, and philosophers must acknowledge the discoveries of biologists, if both are to achieve a full understanding of living organisms. Attempting to strengthen the bridge between biology and philosophy, Mayr offers 28 essays that help clear up the vagueness that persists in biology and proposes a new direction for the philosophy of biology.

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—Nature

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enough open space to provide for the unforeseen auto accident.

I love the woodlands. I care about our environment. But each type of roadway — scenic, local farm-to-market, cross-country, etc. — has its own particular requirements. Any conservation or beautification plan must first maintain or enhance the safety of the roadway. After that prerequisite is met, innovative plans can be laid.

Floramay Ann Miller  
Aberdeen, S.D.

### Fuller foresight?

It is gratifying, but not too surprising, to see that science once again seems to be confirming predictions made by Buckminster Fuller in the mid-1970s and before. In "Building Matter From a Dozen Blocks" (SN: 10/21/89, p.260), researchers seem to be well on their way to concluding that there are three and only three families of fundamental particles out of which the stuff of the Universe (a word Fuller always capitalized) is made.

In 1975, Fuller wrote, "There are only three possible omnisymmetrical, omnitriangulated, least-effort structural systems in nature." He went on to describe the combinations, rotations and permutations of the tetrahedron, octahedron and icosahedron, which form the basis for the three-and-only-three structural systems. His descriptions begin to sound more and more like the families of quarks, leptons and neutrinos reported in SCIENCE NEWS.

Robert G. Chester  
St. Petersburg, Fla.

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