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## Letters

### No complaints about chlorine

We've been using liquid chlorine in our pools, both indoor and outdoor, for the past 20 years. During this time we have had no complaints from swimmers concerning any burning, coughing, or irritation from the chlorine disinfectant. ("Swimmers may get hefty chloroform dose," SN: 1/7/95, p.5).

Why did this article specifically attack chlorine when numerous other products on the market have not met the specifications chlorine has for sanitizing pools?

Raymond P. Cross  
Recreation Supervisor  
North Hempstead, N.Y.

The article was not intended to attack chlorine but to note that some people may unwittingly acquire large exposures to chloroform, a known carcinogen. Moreover, their degree of risk may not be signaled by irritation associated with chlorination.  
— J. Raloff

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Cover: Microwaves propagating inside a specially shaped metal container create distinctive standing wave patterns, as shown. Such laboratory studies provide insights into quantum chaos. (Illustrations: Srinivas Sridhar)

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Science Service, which publishes SCIENCE NEWS, is a nonprofit corporation founded in 1921. It gratefully accepts tax-deductible contributions and bequests to assist its efforts to increase the public understanding of science, with special emphasis on young people. More recently, it has included in its mission increasing scientific literacy among members of underrepresented groups. Through its Youth Programs it administers the International Science and Engineering Fair, the Science Talent Search for the Westinghouse Science Scholarships, and publishes and distributes the *Directory of Student Science Training Programs for Precollege Students*.

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## Webworks

A recent article ("Computer reveals clues to spiderwebs," SN: 1/21/95, p.38) reported on the large role air resistance plays in dissipating impact energy from colliding insects. It states, "Ordinarily, one would not expect a thread less than one-thousandth of a millimeter in diameter to create much resistance in air... [but] it does."

I would like to draw attention to a 1952 publication that clearly documented the resistance that webbing creates: "The spider stood on its head, pointed its spinnerets in the air, and let loose a cloud of fine silk. The silk formed a balloon... the spider let go of the fence and rose in the air... The air was soon filled with tiny balloons, each balloon carrying a spider" (E.B. White, *Charlotte's Web*).

Jamie Hook  
Princeton, N.J.

## Junking DNA dialect?

I read with interest "Does nonsense DNA speak its own dialect?" (SN: 12/10/94, p. 391). The researchers reported conducting linguis-

tic tests on DNA strands and concluding that the frequency of the occurrence of various patterns suggests the strands might form a "language."

It appears that the frequency distribution they are discussing is the Zipf/Pareto distribution, which is noteworthy for its extremely heavy upper tail. This distribution has indeed been matched with the distribution of word lengths in languages. But a key element the researchers may be overlooking is that the distribution also occurs widely elsewhere in nature: in the sizes of cities, asteroids, islands, and extinction episodes, for example. It has also been used in describing the distribution of wealth in many different societies. My familiarity with the distribution comes from the role it plays in computer network traffic, where it appears to be a key element contributing to "fractal" traffic characteristics.

So if this is the cornerstone of the researchers' findings, they should reconsider their interpretation.

Vern Paxon  
Berkeley, Calif.

