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## Letters

### Gee-whiz statistics

In "U.S. populace deemed 'sexually illiterate'" (SN: 9/15/90, p.166), you state that a U.S. teenager acquires a new sexually transmitted disease every 13 seconds. Information expressed in this format belongs to the gee-whiz approach to science reporting, which caters to the scientific and numerical illiteracy of our public and helps to perpetuate it. To make any sense out of information so presented, I have to calculate how many cases per year this amounts to; then I have to estimate how many teenagers there are in the United States and calculate what percentage of that teenage population is affected. That provides me with a meaningful number.

As it turns out, the number is roughly equal to the number of deaths occurring in the United States every 13 seconds. Suppose some publication were to state that someone dies in the United States every 30 seconds. That would get a lot of people to believe that our health

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Cover: *Ficus* leaves provide a nutritious snack for this Costa Rican mantled howling monkey. But other wild plants may offer benefits that go beyond basic nutrition. Field studies hint that mantled howlers, as well as some chimps, bears, elephants and birds, occasionally seek out certain plants for self-medication. Some of those plants have known pharmacological effects in humans. (Photo: Kenneth E. Glander)

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conditions are horrible, yet it would represent a death rate of about half the current rate and would indicate a life expectancy of approximately 150 years.

Fred Kohler  
Ashland, Ore.

### Purposeless evolution

SCIENCE NEWS' frequent references to ultimate purpose in connection with evolution bother me. A significant percentage of even the scientific community apparently misunderstands, misstates and misapplies the concept of natural selection.

Natural selection is, by definition, not directed toward or influenced in its progression by purpose. Whenever one of your articles implies, suggests or states that a trait was developed to do such and such (aid in survival, attract a mate, protect from predation, etc.), it assumes an anti-Darwinian, anti-natural selection posture, promoting myth as scientific fact. While the trait may well serve the function in

question, it was neither designed to do so nor did it evolve to do so. In hindsight, the existence of a function served may suggest the successful implementation of a design solution, but this is an illusion created by the viewpoint. The apparent "solution" observed is the resulting relative distribution of multiple, generational accumulations and losses of precursor characteristics manifested as a trait that performs a function at a point in time.

Since evolution (natural selection) is neither farsighted nor purposeful, any attempt to establish the purpose for which a trait originated is a search for the nonexistent.

Charles W. Morgan  
Stamford, Conn.

### CORRECTION

The velocity of "The fastest solar wind in 50 years" (SN: 10/20/90, p.255) was 7.8 million kilometers per hour, not per second as stated in the article.

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