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This Week

- 356 Estrogen's Emerging Manly Alter Ego
- 356 Herpesvirus linked to multiple sclerosis
- 357 Tracking a black hole eruption
- 357 Corroded planes turn paint pink
- 358 Breaking through the acoustic shock barrier
- 358 Brain chemical may aid mouse mothering
- 359 Excess crimes by mentally retarded on own
- 359 Seedless wonders for winter markets

Research Notes

- 360 Astronomy
- 360 Biomedicine
- 365 Biology
- 366 Science & Society
- 366 Technology

Articles

- 362 Floating Frogs
- 364 Chilled Brains

Cover: This ground squirrel (*Citellus tridecemlineatus*) is just starting to rouse from hibernation. Scientists are studying such animals to determine how they tolerate reduced blood flow to the brain during hibernation. The information may suggest new treatments for people with stroke. (Photo: Kai U. Frerichs)



Departments

- 355 Letters
- 367 Books

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Letters

Time to chill out?

"The Big Chill" (SN: 10/4/97, p. 220) might logically stimulate an important question in the reader's mind: When is the next ice age due to start, if past patterns are followed? Although an answer was not given, I suspect from looking at the graph that, contrary to the worries of global warming specialists, the best estimate is "Right now—in fact, it is overdue."

Daniel J. Shanefield
Piscataway, N.J.

I wonder if the climatologists might be missing a bigger picture. The latest round of ice ages is a relatively recent phenomenon. None of the models discussed—variations in the angle of Earth's rotation axis, orbital precession, or variations in orbital eccentricity—explains why Earth suddenly started experiencing ice ages a million years ago or

the prolonged cooling period that apparently preceded it for some tens of millions of years.

I would think that the effects of whatever caused this global cooling and the ice ages collectively should be understood before the presumably smaller orbital effects are deemed to be the explanation.

Lawrence N. Goeller
Alexandria, Va.

Simple strokes

In "An alphabet for a letter-perfect protein" (SN: 10/4/97, p. 214), the researcher compares the 20-amino-acid code for a protein with the English and Chinese languages: "If you only look at China, you may think it takes hundreds of characters to write a language. But then if you go to England, you see that you can write a perfectly good, functional language with only 26 characters."

Actually, in mainland China's simplified character system there are only seven basic

brush strokes that compose a character; this is analogous to the 20-amino-acid code used for forming proteins. It is the order and position of the brush strokes that determine the actual Chinese character formed; the analogy here is to the amino acid sequence that determines the overall protein shape and function.

Thus Chinese characters are in fact a better analog to protein structure than English, further illustrating the author's point that a diverse language can be composed from a simple alphabet.

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