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COVER: Dead these 70 million years, a planktonic foraminiferan called *Globigerinelloides prairehilensis* seems to have passed away, together with all of its kind, while the earth's magnetic field was weak during a change in polarity. Its fossilized remains are part of the latest evidence in the scientific controversy over a possible link between geomagnetic reversals and species extinctions. See p. 204. (Scanning electron microphoto: Barbara Keating, University of Texas at Dallas)

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LETTERS

How shape a wizened soul?

I shall read Professor Eiseley's most recent book, *All the Strange Hours* (SN: 2/14/76, p. 109), with the same warm appreciation for his philosophical substance and articulate style that I have for each of his preceding books. But I shall be looking for more than *how* he wended his way from obscure solitude to "esoteric success." His unique success at conveying what others must observe and feel, albeit dimly, transcends his rise through the conventional hierarchy of positions and titles. I shall look for the clue to *why* a lonely and abused human will strive so, will care so. How many of us, given that kind of "equal opportunity," would have contracted a wizened soul, if not conceded the whole game to the "Other Player" long since?

It is only the sporadic appearance of human beings like Professor Eiseley that sustains our tenuous claim on the self-conferred title of *Homo sapiens*.

Thomas B. McMullen
Raleigh, N.C.

Astronaut's wings

In reference to your article "Casting Call For Shuttle Crews" (SN: 3/6/76, p. 153), your description of astronaut Fred W. Haise Jr. as being the only "space veteran" of the four men chosen for the space shuttle orbiter's initial flight tests is not precisely true.

Of course, Haise is the only one of the four to actually get out into what is generally regarded as space, but astronaut Joe H. Engle, the designated commander of the second crew, is also the bearer of astronauts' wings. He earned them in June, 1965, 10 months before his appointment as a NASA astronaut, for a rocket-powered leap in the X-15 aircraft to an altitude of about 53.4 miles. By agreement between the Air Force and NASA, any flier who ascends to 50 miles or more is officially designated an astronaut.

James E. Naughton
Union City, N.J.

The inconstant sun

Thank you for your fascinating article on "The Inconstant Sun" (SN: 3/6/76, p. 154). I feel you were somewhat remiss in not pointing out that the 11-year sunspot cycle (actually 11.1 years) is just an average. Periods between maxima have varied from as short as 7.3 years to as long as 17.1 years.

It is interesting to note that most astronomy texts credit Galileo with discovering sunspots, but start their graphs of sunspots around 1750, some 30 years after the Maunder minimum ended. One text explains that this (1750) "... is the date around which sunspot observations become reliable," the absence of sunspots being implicitly unreliable. It sounds like your recent article "Physicists vs. Math."

Charles D. Feldman
Bronx, N.Y.

(The differences in duration are not the only irregularities in the sunspot cycles since the Maunder minimum. As John A. Eddy noted at the AAAS session, at first glance the charts of solar cycles over the last two centuries seem to make the sun look regular and healthy, but on closer examination one sees that no two cycles are alike and that the cycles vary in magnitude by a factor of 2. "I don't think that's a mark of health," he says. "I think it's a mark of a shaky machine."—Ed.)

Photosynthetic bacterium

Your article on our purple membrane (SN: 3/6/76, p. 149) gives a more accurate and balanced account of what we tried to convey in the news conference than most of the other reports I have seen. There is, however, one serious error. The high-resolution map of the protein was not done by us but by N. Unwin and R. Henderson at the MRC Laboratory in Cambridge, England.

Walther Stoeckenius, M.D.
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Do-it-yourself psych

The shortcoming of the article "Do-it-yourself Psychology" (SN: 2/21/76, p. 120) is that it does not go far enough. The effectiveness of "prescription" therapies, conducted personally by a consultant, is an open question, too, and should be evaluated for the protection of the public. Not only should these "prescription" techniques be further validated, but in addition, even more urgently, the *total* effectiveness of the individual therapist practicing with these techniques.

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