Science

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COVER: The chastity-belt theory of fatness (a husband encourages his wife to overeat to keep her fat and faithful) is just one example of the many outside influences that can contribute to a person's overweight condition. The behavioral approach to treating obesity says people need to be aware of such motivations to cope effectively with their problem. See p. 76. (Drawing: Ann Lunsford)

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To the Editor

Ecological ignorance

The comments by Bob Forman (Letters, SN: 7/13/74, p. 19) reflect the growing gap between scientist and layman in knowledge of the human species, effects on the world. His comments also reflect the general ignorance of humanity's dependence on a delicately balanced system called the biosphere.

No species can be said to be "useless." To name only one glaring example, we have not had to totally eradicate large predators to learn their values as agents of population control and natural selection. And we have not "lived a long time without dinosaurs and pterodactyls . . . The Flintstones not withstanding, humans and dinosaurs missed any chance at coexistence by millions of years.

The point here is not to nitpick. It is to illustrate the need for more efforts on the part of scientists and interested laymen to spread informed knowledge. Specifically, speaking to a local civic club would be far more valuable than speaking to a local conservation group, although I hope both can be done.

> Robert A. Bergen President Audubon Society of the Everglades West Palm Beach, Florida

It was with great interest that I read Bob Forman's letter. Mr. Forman's excellent credential as Executive Director of the International Federation of Recreational Vehicle Users no doubt qualifies him as a biologist of the first rank, eminently qualified to determine which species are useless.

As a mere physicist I am not qualified to decide which species are and which are not crucial to the functioning of the ecosystem. As a backpacker and a person who drives a car on highways, I can suggest a species which could be construed as useless: the hardy individuals who use recreational vehicles.

Mr. Forman's description of recreational vehicle users as a group "using the outdoors" is ludicrous in the extreme when one sees these people parked in their vehicles at camping spots equipped with electric outlets and plumbing, sipping cold beer and watching color televisions in their air-conditioned recreational vehicles.

M. F. Wehling Niceville, Fla.

Mr. Forman's statement that "We've lived a long time without dinosaurs and pterodactyls, maybe we can learn to live without a few other similarly useless species," displays a degree of callousness and ignorance I seldom see in the pages of Science News. Whether Mr. Forman likes it or not, there are no useless species. It is a truism of ecology that the living species are inextricably intertwined in complex ways we are only beginning to understand. If you remove any species, no matter how insignificant it may seem to the owner of Winnebago, the repercussions echo throughout the system and will ultimately affect even man.

> Louise A. Purrett Boulder, Colo.

Those "useless species" that Bob Forman refers to (Save the three-toed tree toad) eventually evolved to the most useless species of all-recreational vehicle users.

> M. Gambardella Youngstown, Fla.

Paul H. Powell

A further twist in the double helix

I am curious to know whether or not the double helix pictured in "Twists in the Double Helix" (SN: 6/15/74, p. 388) was meant to be a correct model for DNA. Your illustration shows a molecule built up from like-with-like base pairs, a model which Watson first thought correct, but one which he quickly rejected.

Austin, Texas (A number of sharp-eyed readers caught the fact that we had inadvertently shown a diagram of an earlier, mistaken conception of the double helix. Recalls James D. Watson in his book The Double Helix: ". . . My pulse began to race. If this was dna I should create a bombshell by announcing its discovery. . . . As the clock went past midnight I was becoming more and more pleased. . . . My scheme was torn to shreds by the following noon. . . .

I had chosen the wrong tautomeric forms of guanine and thymine." The final, correct version of the molecule is shown at left.

More letters appear on page 78.

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