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Cover: Recent discoveries about the habitats of some of the earliest life forms on Earth, controversial findings about a meteorite from Mars, and the development of a fleet of robotic planetary explorers have sparked new interest in the search for life in the solar system. (Song sheet courtesy Ron Cowen)



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## Letters

### Force chains and filaments

Was anyone else struck by the similarity of the image of the force chains in a box of glass beads to those of large-scale maps of filaments and streamers of galaxies ("Dry Sand, Wet Sand," SN: 9/20/97, p. 186)?

This shock of recognition reminds me of my first look at images drawn by fractals. Some looked like cross-sections of unknown animals.

*Mark Roeyer  
Lawrence, Kan.*

### What price adaptation?

Twelve years ago, as a graduate student at the University of California, Davis, I chose for a tropical ecology class a topic with which I was enthralled: Chagas' disease ("Paleopathological Puzzles," SN: 8/30/97, p. 136).

Living in San Diego, I thought this would be an ideal location from which to obtain first-

hand information through telephone interviews of the area's emergency room physicians. Much to my dismay, not a single one with whom I spoke had ever heard of the disease.

Although I have not recently polled physicians to see how many are familiar with this pervasive disease, I am certain the disease is far more familiar than it was during my research. Indeed, the San Diego Museum of Man has a permanent display of parasites, including the organism that causes Chagas'. Youngsters are learning of the disease through the computer game Amazon Trail.

The insect family Reduviidae (variously referred to as the kissing bug, assassin bug, and cone-nosed bug), which carries the parasitic trypanosome, is an extremely well adapted one. Myriad species thrive in the varied habitats of Latin America, frequently adapting their lifestyles to those of humans. For example, a species commonly found in palm fronds

lives in the palm roof thatching of human houses, close to a source of blood meals.

The article states that "if researchers ignore the past, they may increase the risk of Chagas'" for future generations. It is more important to address the encroachment of humans into new habitats, however. The parasite-carrying insect is quite adaptable; humans may wish to be, but they will continue to suffer the consequences of trying.

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