during the last 100 million years, you are better off asking a paleontologist than a modeler.

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Fish Otolith Chemistry

I was pleased to see an aspect of fish otolith chemistry reported in Random Samples (13 Nov., p. 1087). The article was particularly timely given the increasing importance of otoliths to both fisheries and environmental research, as evidenced by the interest in the recent symposium "Fish otolith research and application" held in late January at Hilton Head, South Carolina. However, I must point out that the estimation of water temperatures by the analysis of oxygen isotopes in otoliths is not new. In fact, the application of these data to the estimation of both modern and prehistoric water temperatures was discussed in a report published in *Science* in 1967 (1). Other significant contributions to the study of oxygen isotopes in fish otoliths (2) should also not be overlooked.
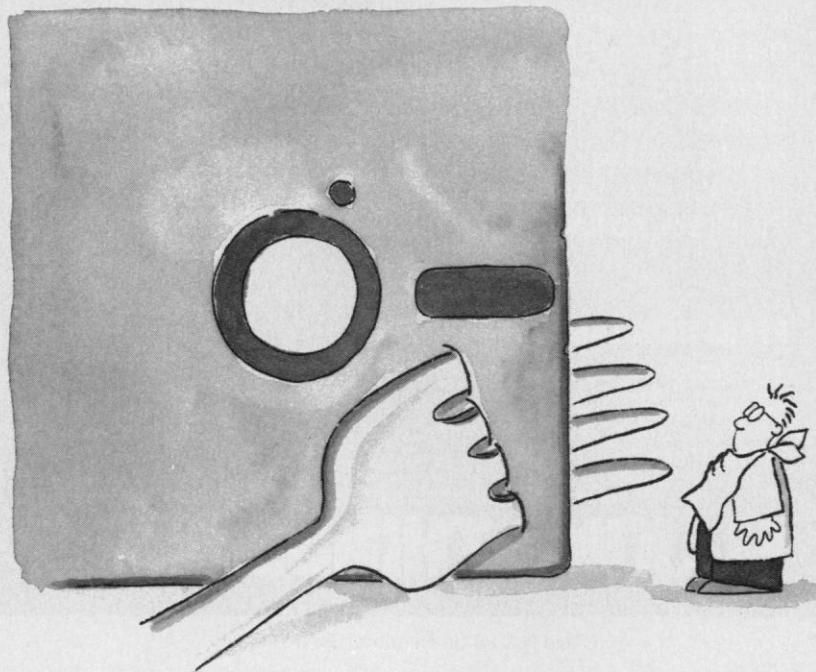
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