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Cover: The 2-inch-long, tree-dwelling coqui frog may be small, but it creates quite a racket, continually warning off male intruders with its "co" call and welcoming females with a "qui." Now scientists have discovered the frog's lungs not only help blare out sounds but also may play a part in receiving sounds. (Photo: Peter Narins)



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## Letters

### Fear of the unknown?

"Neighbors bugged by germ warfare lab" (SN: 4/9/88, p.229), describing the Army's proposal to build a germ warfare lab at Dugway Proving Ground, Utah, boggles the mind. They are going to find a defense against something, but don't yet know what it is? Does anyone ever check these people for their sanity?

I can provide an amusing scenario whereby President Coolidge proposes to Congress to build a defense against ICBMs. How long could he have escaped the funny-farm?

Otto A. Brandt  
Enumclaw, Wash.

### Cold facts

"Dinosaurs in the Dark" (SN: 3/19/88, p.184) has as a basic assumption that the tilt of the earth's axis was the same 70 million years ago as it is today. Where is the proof for that assumption?

If 70 million years ago, the earth's axis was perpendicular with its orbit, then there would

have been no three-month-long winter nights, no Arctic Circle and no Antarctic Circle. Every part of the earth would have received sunlight during each 24-hour period each day of the year.

The evidence is beginning to mount that the earth received a good-sized "whack" from some errant comet/meteorite. Could not this same "whack" have altered the tilt of the earth's axis *vis-à-vis* the plane of its orbit? Is this not a more probable explanation for dinosaurs at the high latitudes?

Warren Finley  
Laguna Beach, Calif.

Many dynamical studies have shown that the planet would be much colder than it is now if the earth's obliquity were zero. For that reason, this scenario is incompatible with direct evidence that the earth was warmer during the Cretaceous period than it is now. As well, fossil trees show growth rings, indicating that the polar regions went through a seasonal cycle.

— R. Monastersky

As a native of Alaska, I found "Dinosaurs in

the Dark" to be both fascinating and amusing.

Richard Monastersky states that during its three-month arctic night, the Colville River region "sometimes" experiences temperatures as low as  $-25^{\circ}\text{C}$ . I have to assume that he either is referring to a heat wave or is in error. When the temperature in Fairbanks (south of the Arctic Circle) rises to  $-30^{\circ}\text{C}$  (about  $-20^{\circ}\text{F}$ ) after a week or two at  $-40^{\circ}\text{C}$ , people can be seen walking down the street with their coats open.

Donald R. Poling  
Terre Haute, Ind.

It is difficult to obtain winter temperatures for the North Slope region in Alaska, where the dinosaur fossils have been found. But in Barrow, a coastal town several hundred kilometers away, the lowest temperature on record is  $-53^{\circ}\text{F}$  (about  $-47^{\circ}\text{C}$ ), according to the National Climatic Data Analysis Center in Asheville, N.C. You are right that North Slope temperatures get much lower than  $-25^{\circ}\text{C}$  — a figure more representative of an average minimum temperature for that region.

— R. Monastersky

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