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Science Service, which publishes SCIENCE NEWS, is a nonprofit corporation founded in 1921. It gratefully accepts tax-deductible contributions and bequests to assist its efforts to increase the public understanding of science, with special emphasis on young people. More recently, it has included in its mission increasing scientific literacy among members of underrepresented groups. Through its Youth Programs it administers the International Science and Engineering Fair, the Science Talent Search for the Westinghouse Science Scholarships, and publishes and distributes the *Directory of Student Science Training Programs for Precollege Students*.

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Letters

Forceful arguments

I must comment on Samuel Vance's letter (SN: 4/24/93, p.267) commenting on your black hole article (SN: 2/6/93, p.86). He said that his 1950s physics course taught him that centrifugal force counters the gravity of the sun.

There is no such thing as centrifugal force. It's a fictitious force that simplifies some calculations and is consonant with intuition. The *real* force is centripetal force, the center-seeking force.

Siegfried N. Lodwig
Chair, Science Division
Centralia College
Centralia, Wash.

Samuel Vance complained that you called Earth's orbital motion "rotation." Neither he nor you used the distinction I was taught in the 1930s: Earth *rotates* on its axis and *revolves* around the sun.

John Biddle Lawrence
San Bernardino, Calif.

Land use study faulted

"Study erodes image of pre-Columbian farmers" (SN: 3/6/93, p.149) appears to make some excessive generalizations about land use in the Americas prior to 1500.

The overall tone of the article seems to be part of the currently fashionable debunking of traditional Native American practices and relationships with the environment. Data from one lake in central Mexico are extrapolated to Native Americans in general. Given the diversity and complexity of Native Americans, this is astonishing.

Could a parallel assertion be made, for instance, after researching long-term erosion patterns into Lake Como in Italy and then issuing a blanket statement about the land use practices of Eurasian peoples? Most researchers would not be so foolish as to make such a pronouncement. The fact that such generalizations are made about Native Americans and other non-European peoples perhaps says something about Euroamerican ethnocentrism.

This is not to imply that the study reported is without significance; it probably has important light to shed upon the problems of environmental degradation associated with hierarchical civilizations and large concentrations of population.

Philip Snyder
Lecturer in Anthropology
Wells College
Aurora, N.Y.

Roping aquiferians above ground

Investigators bent on "Saving Hades' Creatures" (SN: 3/13/93, p.172) should visit downtown New Braunfels, Texas, located over the Edwards Aquifer. There, a river gushes from a hole in the ground, runs a way, then drops out of sight, as though seeking to join the Styx. Perhaps some of Hades' creatures could be captured while flowing along on their brief ride in the upper world.

Alan L. Bossinger
Locust Valley, N.Y.

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