

# SCIENCE

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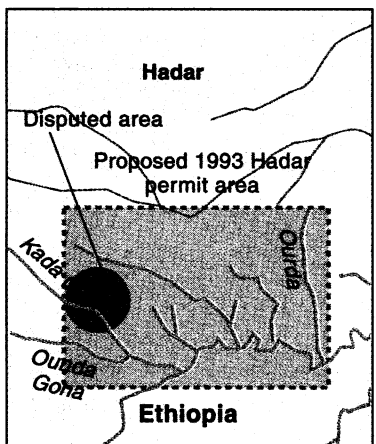
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# LETTERS

## Fossil Collecting

After reading Ann Gibbons' News & Comment article "Claim-jumping charges ignite controversy at meeting" (14 Apr., p. 196) about recent allegations of "claim jumping" in Ethiopia against members of the Institute of Human Origins research team, we believe it is necessary to comment.

We emphatically state that the Institute of Human Origins' Hadar Research Project has never conducted research outside its permit boundaries, which are approved annually by the Ethiopian Ministry of Culture and Sport. The work of the international team at Hadar will withstand any legitimate scrutiny, as will our scrupulous attention to the permit process in Ethiopia.



**Land of contention.** Fossil-rich site in Ethiopia that is the focus of dispute.

Many of the members of the international Hadar Research Project signing this letter have worked in Africa since the late 1960s and early 1970s. It is a serious matter that such an experienced and respected team is being accused of "claim jumping" and "stealing" fossils. Even setting aside the issue of integrity, those familiar with site research will understand the practical reason one would not consider such a move. Fossils collected outside an allotted permit area are useless. If a researcher illegally collected fossils, they would be of no value to the finders, because publication of the finds would be an admission of theft. If the finds could not be published, then they would have no value to the researcher.

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## Can Money Buy Happiness?

The Random Samples item "Money isn't everything" (24 Mar., p. 1765) describes research which arrives at the conclusion that, as the fraction of "very happy" people in affluent countries (~30%) does not rise with increased average income per capita, the successful pursuit of money is not an important factor in the pursuit of happiness, at least in these countries.

One can, however, give the data a completely different interpretation: people's happiness depends mainly on their level of wealth compared with that of other people immediately around them, that is, the "keeping up with (and surpassing, one hopes) the Jones's" effect. This would mean that, unless you are in the top 30% of the income bracket of your society, you are probably not happy. For most people in these societies (not all), the pursuit and

achievement of wealth would be the key goal for happiness.

Isn't this in closer agreement with our day-to-day experience? Maybe the 75% of young people mentioned in the article who consider being very well off financially as very important or essential are not so far off the mark.

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## Endangered Species Legislation

Unlike Charles C. Mann and Mark Plummer (News, 3 Mar. p. 1256), I am optimistic about the effectiveness of the Endangered Species Act (ESA). Certainly it is not a comprehensive biodiversity protection law, and there are many ways it could be strengthened and improved. But its most crucial task is preventing the extinction of species and populations, and it has succeeded, arresting the decline of hundreds of species. It has also helped states cope with species endangerment and provided the muscle for the United States to prevent extinctions abroad through the Convention

on International Trade of Endangered Species of Wild Fauna and Flora; designation per se has raised people's awareness of our effects on the biota. The ESA has served as a model for similar measures in a number of other countries.

Recovering species is the ultimate goal, but that cannot be achieved until the factors that diminished populations to endangerment are ameliorated and the species have had time to recover. The ESA has no power to stop rampant human population growth and increasing pressure to use organisms, lands, and waters, the driving forces underlying almost all endangerment. Nor can it fundamentally alter a species' population biology;  $r$ , the intrinsic rate of natural increase, a normal age structure, and a viable sex ratio cannot be legislated. Criticizing the law for failing to recover species ignores these biological realities, persistent underfunding for recovery efforts, and the determined efforts to oppose individual listings and recovery programs and of those to weaken ESA overall.

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## Environmental Concerns and the Third World

In their recent Policy Forum "Economic growth, carrying capacity, and the environment" (28 Apr., p. 520), Kenneth Arrow and his colleagues caution against uncritical acceptance of the idea "that economic growth is good for the environment." They provide an insightful analysis of the tenuous evidence for this idea, including the limited data supporting "an empirical relation between per capita income [of nations] and some measures of environmental quality." Although widely accepted, one key element of the "growth-is-good" argument—the widespread assumption that people in poor nations are not as concerned about environmental quality as are their counterparts in wealthy nations—has recently been tested empirically and found to be incorrect.

In 1992, the George H. Gallup International Institute conducted a survey of public perceptions and opinions regarding environmental issues in 24 nations, ranging from poor countries such as Nigeria, the Philippines, and Turkey to wealthy European and North American countries. Gallup's "Health of the Planet Survey" involved face-to-face interviews with representative samples of citizens within these nations

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