

# Science<sup>®</sup> News

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**COVER:** Geysers, like the one in this old photograph, are spectacular examples of geothermal power that have drawn tourists for centuries. Less visible are the hot brine wells of California's Salton Trough, but the latter may someday be used to make electric power. See p. 28.

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July 13, 1974

# To the Editor

## Protein, grain and famine

You are repeating the reductionary opinions of urban intellectuals when you say, in "The Omens of Famine" (SN: 5/11/74, p. 306) that meat "can require as much as seven times the grain, as feed, to put an equivalent amount of protein on the table."

The high consumption of grain by American livestock is an aberration hard to find elsewhere, and is only one example of the entropy we install when we apply corporate theories of maximization and monoculture to biological matters.

The reason for having livestock is that they transform into protein materials that *man cannot eat*. Humanity endures in places like Afghanistan because the goats are able to survive on the coarse vegetation that remains. In Lapland, the reindeer provide protein out of mosses and lichens. In the temperate zones, livestock add to the human diet by eating those things that occur in the ecosystem of man-and-environment which the human element cannot use. Cows eat grass. Chickens fatten on insects and herbs. Hogs utilize wastes such as apple pomace, whey, pea pods and glean acorns, roots, harvested fields, windfall fruits.

What the industrial civilization has not understood is that agriculture remains the basis of any economy because it is the solar interface, without which any economy is immediately entropic. The diversified family farm, which when well done becomes indistinguishably part of the ecosystem, is to the economy what the primary producers of the soil and the water are to the biome. Without them, nothing. They can no more be replaced with food factories than can the micro-organisms of the soil be replaced by chemicals, for all such industrial innovations substitute energy consumption for energy creation.

Joan Matheson  
Valentine, Neb.

## Grain, alcohol and famine

Re: Part 2 of "Confirming Famine," by John H. Douglas (SN: 5/18/74, p. 322).

In the next to last paragraph, the question is posed, "But the issue is finally a moral one: Will the United States and other industrialized countries be willing to cut back on meat consumption to free grain for the world's poor?"

A brief article titled, "The Food Short-

age," in a recent issue of Parade magazine (June 2, 1974) stated that over 3 million tons of malt, barley, corn and other grains was used in the United States in 1972 to produce beer, whiskey and other alcoholic spirits. Not only is beverage alcohol our biggest drug problem, but a tremendous quantity of food grains is wasted in producing the stuff. Therefore, it seems obvious that elimination of this wasteful use of grain would be the first source of additional grain for the world's poor. This issue, as is cutting back on meat consumption, is a moral one!

Carl F. Zickert  
Albuquerque, N.M.

## Save the three-toed tree toad

I am hopeful that your approach to the various outdoor problems as outlined in the two articles on endangered species (SN: 6/8/74, pp. 368, 371) will lead to a rational association of the groups using the outdoors as well as those who are so close to the trees that they can't see the woods.

In the past, the superconservationist groups have tried to landlock anything that moves, including the human race, which has a considerable need for the outdoors, to the point of absurdity. If the Society for the Preservation of the Three Toed Tree Toad and the Sandflea Protective Association would work hand in hand with the recreational groups, instead of trying to butt it out head to head, a lot more could be accomplished.

In the absence of better population control, the human race will probably have to take precedence over lesser species, and multiple use of our publicly owned lands will be a necessity.

We've lived a long time without dinosaurs and pterodactyls, maybe we can learn to live without a few other similarly useless species.

Bob Forman  
Executive Director  
International Federation of  
Recreational Vehicle Users  
Monmouth, Ill.

(On the other hand, how many would drive their Winnebagos to the wilderness if it had no grizzly bears?—Ed.)

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