# Letters

### *The Merck Index Online*

I was surprised to read in Jeffrey L. Fox's article "EPA dumps chemical data system" (News and Comment, 16 Nov., p. 816) that "ICI [Information Consultants Incorporated] plans to put the contents of [*The Merck Index*] on-line."

*The Merck Index* editorial staff has been working closely with a number of database vendors during the past 2 years. We hope to complete *The Merck Index Online* by January 1985 and will announce at that time the vendors through whom the online version will be available. Although one meeting was held with ICI, we are not considering them at the present time.

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### The Twitch: A Cautionary Tale

I suspect that the report by Evert Lagerweij *et al.* (14 Sept., p. 1172) and subsequent correspondence (Letters, 12 Oct., p. 116) concerning the use of a twitch to grasp the upper lip of a horse could well lead to an undesirable experience for an innocent research worker with too inquiring a mind.

I have a thoroughbred who is a gentle and noble creature and generally gives the lie to the wounding epigram that a horse is dangerous at both ends and uncomfortable in the middle. A few days ago, two young helpers set out to clip his winter coat. They had been warned to clip only his body and not to clip his head—a process he does not enjoy. Nevertheless, in my absence, in order to give him the smartest possible appearance, one applied a twitch to his upper lip, another the clippers to his head. The consequence was that one of the pair was forced by the outraged animal to flee the stable, whilst the other was severely concussed and needed to recover in the hospital.

I hesitate to suggest either that the above experiment is repeatable or that it is possible to design an experiment which disproves my theory that a twitch applied to a horse does *not* induce analgesia or sedation, even though it might win submission. I relate all this merely as a cautionary tale to prevent any of your readers from being lulled into a false sense of security when dealing with the twitch and the equine species.

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### Firewood Conservation

A new study (*1*) by Earthscan (News and Comment, 9 Nov., p. 676) argues that worldwide efforts to address firewood shortages have not significantly improved the situation. While this assessment is accurate, it does not consider the causes of the failure, which may well be an overemphasis on promoting reforestation and new energy sources to the detriment of initiatives that would encourage firewood conservation.

The Khumbu Valley of Nepal is a case in point. This majestic region, which descends off the slopes of Mount Everest, has been devastated by deforestation. Over the past three decades, demand for firewood has steadily increased, leaving fragile hillsides nearly barren and forcing villagers to travel long distances for their fuel supplies. The Nepali government, with support from foreign aid agencies, has responded with ambitious tree-planting programs, as well as restrictions on woodcutting in damaged areas. In addition, alternative energy projects have been developed, including a 30-kilowatt hydroelectric scheme in the main village of Namche Bazaar.

But in the near future, these efforts will not show measurable benefits. Trees grow slowly in the harsh Khumbu climate, often taking 60 years to reach maturity. Although the reforestation may help stem erosion, it will be several generations before the local people can harvest firewood. The Unesco-backed hydro project only provides enough power for lighting and a small number of electric hot plates. Displacement of firewood demand is minimal.

Conservation measures, however, have great potential for alleviating the firewood crisis. Currently, the people of Khumbu use stoves that waste a large portion of the wood burned. They continue this practice despite the existence of more efficient stoves that could accomplish the same cooking tasks with 30 to 40 percent less fuel. The new stoves have already been successfully introduced into some Nepali villages.

Such programs must be dramatically expanded, as proposed in a report to the Nepali government last year (*2*). Reforestation can complement conservation, but the latter strategy will have better results, in less time, and at less cost, than any efforts directed at producing more firewood.

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#### References and Notes

1. E. Eckholm, G. Foley, G. Barnard, L. Timberlake, *Fuelwood: The Energy Crisis That Won't Go Away* (Earthscan, Washington, D.C., 1984).
2. A. C. Stern, "Promoting firewood conservation in Nepal's Sagarmatha National Park: A strategy for survival" (Report to His Majesty's Government of Nepal, Department of National Parks and Wildlife Conservation, Kathmandu, September 1983).

Colin Norman does not mention one means whereby the United States might help slow the deforestation of the Third World. Our country could help the poor of many developing nations by supplying them with smokeless solid fuels of low sulfur content. As Norman notes, the rich in these nations often burn kerosene, at great cost to the nations' economies; the poor must burn wood. Even a nation with coal is granted only a wretched third choice: in India, for example, many poor women breathe smoke from the bituminous coal they burn when they cook dinner. India has built at least one large plant—designed in India—to convert subbituminous coal to smokeless solid fuel for cooking. India's resources are not sufficient to build many plants of this type quickly. We could help India and other Third World nations by shipping either anthracite or smokeless fuels manufactured from low-sulfur bituminous coals of the East and subbituminous coals of the West. Most countries could easily manufacture cheap braziers in which to burn smokeless fuels.

Expanding anthracite production quickly would not be easy, but many coal mines in the low-sulfur bituminous coal district of southwestern Virginia, southern West Virginia, and eastern Kentucky are either idle or working at reduced capacity. This district has not recovered from the recent recession; un-