A debate about scientific journal prices continues to stimulate letter writers, who discuss how publishers should make comparisons among journals and arrive at subscription prices. A so-called "heifer" is not one. Intellectual property officers express concern about fair competition in the plant biotechnology community, saying, "the holders of...proprietary 'upstream' technologies have effective veto power over whom universities can and cannot approach with their technologies for commercial development." The disappearance of ancient forests is lamented. And how to measure hominid brain sizes is debated.

Journal Economics

In a recent letter (*Science*'s Compass, 27 Nov., p. 1643), Peter T. Shepherd of Elsevier comments on the article "New journals launched to fight rising prices" by David Malakoff (News of the Week, 30 Oct., p. 853), in which I was quoted as a representative of the Scholarly Publishing and Academic Resources Coalition (SPARC). Although I disagree about substance, Shepherd is right that "the debate on the future of journal publishing is both necessary and timely." And I think that his invitation to "compare like with like" is an excellent idea. Such comparison clearly demonstrates the value of the alternative journals offered by SPARC's partners. Comparative data do not, however, support Shepherd's suggestion that the debate lacks facts or reflects prejudice (presumably against publishers whose pursuit of excessive profit has gravely damaged scientific communication).

Let's look at the facts: The cost of a subscription to the Royal Society of Chemistry's *PhysChemComm*, which has been endorsed by SPARC, equates to 0.77 pounds sterling (about $1.30) per article. That is one-fifth the cost per article of Elsevier's *Chemical Physics Letters*, a title with which *PhysChemComm* aims to compete.

By the time it has ramped up, the American Chemical Society's *Organic Letters*, also supported by SPARC, will deliver 65% to 70% of the editorial pages of Elsevier's *Tetrahedron Letters* at about 25% of the latter's price. Usage data collected by many libraries clearly demonstrate that the journals of the American Chemical Society are among the lowest-cost chemistry journals available. They also are very heavily cited.

If Elsevier wants to get the facts on the table, why don't they and other publishers make data readily available on price per article for their journals. Granted, this is an incomplete view of a journal's value, but combining this with information on features, local demand, impact factors, and other metrics addresses Shepherd's call for a discussion based on statistics that enlighten. I'm for that.

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Elsevier's Peter Shepherd describes *Tetrahedron Letters* as an "excellent value for money," ignoring a comparison with the *Journal of Organic Chemistry*, which is available to library subscribers at less than $1 per article. If Elsevier were able to publish a $1-per-article "economy edition" of *Tetrahedron Letters* (by instituting reasonable page or article charges to authors, charging more equitable subscription rates for personal and student subscriptions, and setting a more realistic profit margin), they could probably reduce the library cost of *Tetrahedron Letters* to about $2800, which would make it much more competitive with *Organic Letters*.

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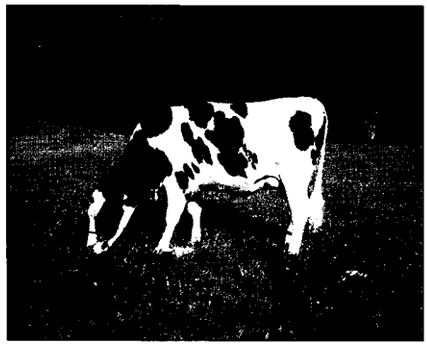

Cressy, the nonheifer, whose milk contains hepatitis B surface antigen

CREDIT: GALA DESIGN

Miracle Heifer?

The article "Improving gene transfer into livestock" by Anne Simon Moffat (News of the Week, 27 Nov., p. 1619) updates us on an impressive advance in gene transfer procedure from the lab of Robert Bremel and colleagues. However, I believe that the most intriguing bit of news in this article was mentioned only cursorily in the caption of the accompanying photograph. It read, "This heifer, Cressy, produces hepatitis B surface antigen in her milk." As an undergraduate with limited training, I am still scratching my head and trying to figure out how those guys got a heifer to produce milk. Will we be reading more on this topic in the future?

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Editors' note
A heifer is a young cow that has not had a calf. Clearly, Cressy has had a calf. We regret the error.

What's in a "Midden"?

Perhaps the mixed agricultural/hunter-gatherer culture (Special Section, Archaeology, 20 Nov., p. 1441–1458) would be less surprising if the scope of our own culture were better known. A future archaeologist digging into my grandparents' North Louisiana kitchen midden (they had one!) might conclude from the mixture of squirrel, wild duck, domestic chicken, and pig bones that they hadn't quite made the transition to agriculture. If the archaeologist found the fossilized remains of a pig killed in the fall, he or she might wonder if the pig was domesticated; the stomach would have been full of acorns. Pigs were fattened by releasing them into the creek bottoms in the early fall. The first freeze ("Hog-killing weather!") was the occasion to hunt them down for slaughter.

When I was a small boy in the 1940s, about half of my protein, perhaps more during World War II, came from wild game and fish when meat was rationed. We also ate wild blackberries, plums, muscadine grapes, mayhaws, pears, persimmons, and hickory nuts. The farm grew cotton for a cash crop, and corn to feed the sows, milk cows (two), and the mule. With small-scale cotton farming no longer profitable after World War II, my grandfather brought in the small amount of cash needed for subsistence by trapping mink and raccoons for their fur.

Would an archaeologist be able to figure out that the family produced three physicists?

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From Mice to Maize

The recent exchange of letters between David S. Block and Daniel J. Curran and Rebecca S. Eisenberg and Michael Heller