The positive reception of transgenic organisms in Europe is noted. Thomas Edison's contributions to science are lauded by a letter writer, who asks, "Why can't we just adore this giant personality?" Several of the many reactions received to an editorial about animal rights are presented. A plea for improvements at the Spanish Natural History Museum is put forth. Evidence that animals were domesticated in places other than the Near East is offered. And a Biosphere 2 scientist suggests one possible, partial explanation for the North American carbon sink.

Transgenic Crops in Europe

Regarding "Scorecard '97: Designer crops" (Breakthrough of the Year, 18 Dec., p. 2159), your prediction regarding a battle over transgenic crops in Europe was certainly borne out; however, the score totaled up at the end of the year does not mention the recent election in Switzerland, in which experiments dealing with transgenic organisms were given a sound vote of confidence by the population of the country. Accordingly, it seems to me that the score at present is 1 to 1. It will be interesting to see how the score changes in the near future, with the increasing availability of transgenic crops.

Milton P. Gordon
Department of Biochemistry, University of Washington, Seattle, WA 98195, USA. E-mail: miltong@u.washington.edu

Edison and His Laboratory

Upon perusing the 11 December issue of *Science* (p. 1997), I found in Bettyann Holtzmann Kevles's review of the book *Edison: A Life of Invention* by Paul Israel, the following about Thomas Edison's laboratory: "Nevertheless, Israel explains, Edison's laboratory was never really more than an overgrown workshop." The man who gave us automated telegraphy, mimeograph copiers, incandescent lighting systems, talking machines, the Edison effect, telephones that worked, electric locomotives, superior storage batteries, cinematic films, and other epic items deserves better.

Calling Edison's laboratory an "overgrown workshop" does not do justice to either his laboratory or workshops in general. It is the workshops within laboratories that make them effective. Try to imagine Faraday or J. J. Thomson without their "workshops." Or, more recently, E. O. Lawrence.

If Edison's laboratory was not a model for General Electric's (GE's) laboratory, then why did its first version, Steinmetz's barn, look so much like Menlo Park? And why did GE's laboratory have a large machine shop, a precision instrument shop, a metalworking shop, a vacuum-tube shop, a foundry and forge shop, a glass-blowing shop, and more?

If Edison depended on "knowledge achieved through tinkering, rather than research" (again quoting from the review), why was his desk at the East Orange, New Jersey, site located in the center of the atrium of a magnificent multistoried library? Tinkerer indeed! The very tube I am writing this on uses his "effect," and his technological advances, for its operation. Why can't we just adore this giant personality?

CREDIT: JOE SUTLIFF

Was Thomas Edison a "tinkerer" with an "overgrown workshop" for a laboratory?

John J. Gilman
Department of Materials Science and Engineering, School of Engineering and Applied Science, University of California, Los Angeles, CA 90095–1595, USA

Animal Rights

The 20 November editorial "Animal rights: Reaching the public" by P. Michael Conn and James Parker (*Science*'s Compass, p. 1417) defends a noble cause—animal research. But like essentially all such defenses, it rests on the medical model and counsels scientists to do the impossible.

Research on animal behavior, which is usually conducted (grant-getting rhetoric apart) out of interest in the behavior of animals, is one of the areas hardest hit by animal care regulations. Yet the real defense of this work is not medical advance (although such advances may come from such research), but the fundamental importance of understanding the biological world. Most animal behavior research is noninvasive, depends for its success on the health and well-being of its animal subjects, and may help improve the welfare of individual animals as well as the survival of many endangered species. Consequently, the fact that it has been especially hard hit by the costly, bureaucratic, and often harmful animal care regulations we all suffer under is especially disgraceful.

I have tried without success to get the American Psychological Association to at least seek some relief for noninvasive animal researchers. But an ethologist at my university must still file a 14-page protocol for his research watching wild birds or keeping goldfish in a tank (and the tank had better not be in a room with any other animal!). It will not do to advise working scientists to "communicate their message to the public." Science is competitive; few can succeed as both scientist and political activist. We must rely on our professional associations to take up the cudgels on our behalf. On this topic, they seem to be failing us.

J. E. R. Staddon
Department of Psychology: Experimental, Duke University, Box 90086, Durham, NC 27708–0086, USA

Conn and Parker misrepresent individuals in the animal rights community by using a "grandmotherly" figure (who is portrayed as uneducated and scientifically unsophisticated) to represent those concerned with animal welfare. We are both trained scientists who are not exceptional members of the animal rights community. Most are well educated. Carl Sagan best expressed our feelings when he said that he was "conflicted about animal experimentation." So are we. Although we do not advocate abandonment of all animal research, we strongly support the humane treatment of all animals.

Barbara Coalgate
Jerry Coalgate
6588 Medinah Lane, Alexandria, VA 22312, USA

In their editorial, Conn and Parker emphasize outreach as a means of educating the public about the indispensable role animals play in biomedical research. More important, they stress the need to pursue a more compassionate approach to the publicly sensitive issue of animal experimentation. One critical issue left unmentioned