tion and methodology of the research are left to the judgment of the researchers themselves, and proposals are subject to peer review. The government shares the cost of these efforts and so encourages the critical connection between scientific excellence and industrial purposes.

EDWARD E. DAVID, JR.
Exxon Research and Engineering Company, Florham Park, New Jersey 07932

Fossils in Asphalt

The Research News article "Work on U.S. oil sands heating up" (14 Mar., p. 1191) does not address a little known but very important environmental problem associated with surface deposits of asphalt. Many such sites, Rancho La Brea in Los Angeles being the best known, contain areas where prehistoric asphalt seeps have caught and preserved excellent samples of past biota. At Rancho La Brea the variety of remains include a wide range of well-preserved late Pleistocene specimens: pollen, diatoms, seeds, leaves, wood, mollusks, ostracods, a tremendous variety of insects, and vertebrates from stickleback fishes to mammoths. Anthropological-archeological specimens include a 9000-year-old human skeleton (*1*) and a variety of younger artifacts, those of bone and wood being especially important. This type of deposit yields an extremely complete biotic record unusually suited to detailed paleoecological studies.

Other fossiliferous asphalt deposits are found in California, Texas, Peru, Trinidad, the Caucasus region of the Soviet Union, and Iran [those in the Zagros Mountains of southern Iran range in age from the Late Miocene to Recent (*2*)]. Of these, three are or will soon be adversely affected by commercial exploitation as petroleum resources: McKittrick in California, the Trinidad "lakes," and Talara in Peru.

The hydrocarbon-saturated diatomite at McKittrick is partially overlain by late Pleistocene to Recent asphalt flows containing a rich assemblage of plants, invertebrates, and vertebrates. With the cooperation of the Getty Oil Company, an environmental impact report was prepared (*3*) which includes plans for the salvage and preservation of the portion of the deposit owned by Getty Oil. I do not know whether similar action will be taken in areas owned by other companies. Relatively few specimens are known from the Trinidad deposits, but their potential is enormous. The Royal Ontario Museum has collected thousands of specimens from Talara, which appear to be only a small fraction of what could be recovered. These deposits have been mined for many years to provide road-building materials (the fossils serving as gravel), a practice that reportedly continues to this day (*4*).

Many areas with surface deposits of asphalt have never been critically examined to determine if they might have associated fossil deposits. The excellent preservation of a wide variety of life characteristic of fossiliferous breas and their known geologic span of Late Miocene to Recent make them extremely important paleontological resources. All such areas marked for development should be carefully checked or we might well lose unique and irreplaceable records of the past.

WILLIAM A. AKERSTEN
George C. Page Museum, Los Angeles, California 90036

References

1. R. Berger, R. Protsch, R. Reynolds, C. Rozaire, J. R. Sackett, *Univ. Calif. Berkeley Archaeol. Res. Fac. Contrib.* **12**, 46 (1971).
2. D. M. Lay, R. Redding, R. Singer, W. Farrand, *Progress Report on 1976 Studies of the Mordeh Fel Fossil Deposits* (prepared for submission to the Department of the Environment of Iran); D. M. Lay, personal communication.
3. *Draft EIR, Proposed Getty Oil Company Diatomite Mining and Oil Extraction Project, McKittrick Oil Field, Kern County, California* (prepared by Dames and Moore, Santa Barbara, for the Kern County Planning Department, Bakersfield, Calif., 27 April 1979).
4. K. E. Campbell, Jr., *Royal Ontario Mus. Life Sci. Contrib.* **118**, 16 (1979); personal communication.

Room Temperature

While recently conducting some commonly used assays for proteins and carbohydrates, the portion of the protocol requiring the samples to "sit at room temperature" for a designated time raised an interesting thought.

In light of President Carter's recent extension of the Emergency Building Temperature Restrictions Plan, I would like to suggest the following. "Room temperature" should no longer be assumed to be approximately 21°C, but to fall into three major categories: (i) spring-fall room temperature (March-May, September-November), 21°C: (ii) summer room temperature (June-August), 25.6°C; and (iii) winter room temperature (December-February), 18.3°C, except during unoccupied periods, when it would be understood to be 10°C.

MICHELE A. CRAYTON
Department of Biology, Pacific Lutheran University, Tacoma, Washington 98447