

## NATURAL ODORS IN PRIMATES

It may be no accident that there is an odor to sweat or that musk and civet—sex-linked scent agents of the musk deer and civet cat, respectively—are used in perfumes. People's behavior could be more strongly influenced by smell than they think.

The sense of smell is less well developed in man and other primates than it is in the lower animals. Nevertheless, says Gisela Epple, of the University of Pennsylvania and the Monell Chemical Senses Center in Philadelphia, "We have good evidence that chemical signals (pheromones) have a much more important function in the reproduction and social life of primates than is generally believed. . . . This may even apply to man. . . ."

Epple has been studying the scent-related behavior of primates, particularly the South American marmoset monkey, under a National Science Foundation research grant. She is finding that much of those primates' behavior, including the social order within the group and mating patterns, appears to be regulated by chemical communications, principally odor.

Epple does not suggest that odor is of direct or primary importance in human behavior. If there is an effect, she says, it would certainly be subtle and complex. "Since humans have the smallest olfactory system of any primate," she said, "we may simply have become unaccustomed to regarding scent as a motivational force."

Nevertheless, there seems to be some evidence of olfactory influences on human behavior. Children, she has noted, are not only tolerant of but at some stage may be preoccupied with certain body odors. "Whether they change because they outgrow it or because of social conditioning we can't say." Some primitive peoples use body odors in some of their social rituals. Psychiatric literature notes instances in which specific behavior or inhibition is triggered by smell. And one researcher has found that in a college setting the menstrual cycles of roommates or close friends appeared to have become synchronous; odor may have played a part in that phenomenon.

The implications of Epple's research for human behavior, though distant, are intriguing. They are far from a focus of the research, however. She anticipates several additional years' work in spelling out chemical communications just for the marmoset.

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### Palo Alto's "Involvement Corps"

The "Involvement Corps" of Palo Alto, Calif., involves young people and adults in programs that "combine the savvy of the young with middle-class expertise in the workings of the system" to effect social change, according to Ellsworth Culver, executive director. Cleaning up the environment is one of its programs. For details write to Involvement Corps, 501 Webster St., Palo Alto, Calif. 94301.

## N.S.F. SOLICITS PLANS

The National Science Foundation seeks proposals for its new Comprehensive Teacher-Education Program (CTEP) and has just published a *Guide for Preparation of Proposals*.

CTEP will support an interrelated set of activities for improving precollege teacher education. The program includes both pre-service and in-service components, and it combines elements of the academic-year, summer, and in-service institutes and other programs that traditionally have been funded separately by NSF.

Projects in CTEP should be designed to meet demonstrated science-education needs in a given geographic region or in a particular subject or should be concerned with other factors deemed appropriate by the proposing institution. Projects are expected to produce changes in the teacher-education activities of the host institutions and in the way they cooperate with schools.

There is no specific deadline for the submission of proposals. Processing of a proposal requires approximately six months. Institutions eligible to apply for grants under CTEP are colleges and universities that grant at least the baccalaureate degree in science and mathematics, and appropriate nonprofit organizations.

For additional information and a copy of the *Guide for Preparation of Proposals, Comprehensive Grants for Teacher Education (NSF E-71-4)* write to Program Director for Academic-Year Study, Division of Precollege Education in Science, National Science Foundation, Washington, D.C. 20550.

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## OFFICE OF NOISE ABATEMENT

The U.S. Environmental Protection Agency has established an Office of Noise Abatement and Control to investigate the causes and sources of noise and determine their effects on the public health and welfare. The Noise Pollution and Abatement Act of 1970 directed EPA to set up such an office.

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## BLUNDERING SPECIALIZATION

To appreciate the crucial significance of a link such as humus, one must, of course, see it in its two roles [storer of nitrogen; soil-conditioner] simultaneously. Unfortunately, this type of vision is not fostered by the kind of specialization that isolates biologists into separate camps: experts either on soil structure or on plant nutrition. The tendency to consider only one thing at a time is a chief reason we have failed to understand the environment and have blundered into destroying it.

Barry Commoner, 1971: "The Closing Circle," *New Yorker* 47 (32): 52