Letters

Pest Control Debates in Court

Upholt, of the Federal Committee on Pest Control (Letters, 5 April), objects to the judicial arm of our government as arbiter of the 20-year controversy over certain pesticide uses. But industry, in which so many scientists are enmeshed, routinely resorts to the courts to force issues. It is obvious that the current pesticide policy revolution in Michigan was precipitated by the Environmental Defense Fund's lawsuit against that state's Department of Agriculture (22 Dec., p. 1552) which continues to use dieldrin in a futile effort to "eradicate" the Japanese Beetle, an insect naturalized and accepted to the south and east of a state line. Never before had Michigan's Department of Conservation scientists had an opportunity to present their data where they would be listened to. If a judge is not scientifically competent, a competent lawyer can at least show him which scientists have been arbitrary, and have followed the doctrinaire thinking that has made this pesticide controversy so stubborn. For example, that Michigan court record shows that one Japanese beetle is cause for declaring that an infestation exists, and imposing a quarantine. And yet this cooperative program was "approved" by the FCPC. This, and the fact that Department of Interior biologists had shared in the decision, was a principal defense of the Michigan Department of Agriculture.

The facts seem to be that the FCPC's procedure does not involve approval. Committee members are allowed to object to a proposed program, but this imposes a burden of proof on the objectors even though the proposals under review are themselves not scientifically documented. This hamstrings FCPC effectiveness because few bureaucrats care to contend with their fellows to that extent. Further, as Upholt admits, the program agency may still act as it pleases because the FCPC has no statutory authority.

Our difficulty is that the ecology of pest control is currently beyond the sophistication of most pest controllers,

and that the Department of the Interior, the only ecologically oriented agency, is both low on the federal totem pole and outnumbered on the FCPC. Under these circumstances, "Advise and Consent" is a soporific prescription.

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Poland: Barriers and Purges

It may interest readers of Science to know that the current purge of Polish intellectuals has now been extended to include at least one of its outstanding scientists. During my present stay in Rome, I received several invitations to lecture in Polish universities this spring. Early in March, my hosts wrote that approval for a visa had been cleared through their Ministries of Foreign Affairs and Health, and it was only necessary to present myself at the Polish Consulate in Rome to obtain it. When I did so a short time later, no visa was available nor was there any expectation that one was forthcoming. I made an application and waited several weeks. Visits to the Consulate during this time produced neither the visa nor any information. Only after intercession by an American Embassy official in Rome did the situation become clear to me. Visas were being withheld from Americans, even diplomats, and especially Jews.

On 2 April, I received a letter from one of my hosts requesting specifics of my visit so that final arrangements could be made. I wrote and explained the difficulties. Our letters must have crossed. His letter of 4 April was a shock to me, my family, and my colleagues at the Institute. Instead of the usual jovial, enthusiastic letter in English, this was written in terse German. One sentence sums it up: "Von heute bin ich ohne Institut, ohne Arbeit, ohne lebensmittel"---"As of today, I am without an institute, without work, and without a livelihood." This man, whose name is best withheld, was dismissed with apparently no warning at the apex

of a productive and highly honored career. He had served with the World Health Organization, received honorary fellowships in scientific societies throughout Europe, and held honorary degrees from a number of universities. He had received high scientific honors from his own government and the Soviet Union. Now the professor, his wife, and their two sons, who are already launched on their own professional careers, are forced to leave Poland for some land where they may work and study in peace.

There is an element of tragic irony: the professor's wife and sons are not Jewish, and he renounced Judaism years ago. Yet he could not escape the master files of the bigots. For that handful of Polish Jews who escaped the Nazi slaughter some 25 years ago, the dream of peaceful integration into Polish life has again been shattered.

Last year I was happy to participate in a scientific exchange program arranged through the Polish and U.S. academies of science. I felt then and I still feel that personal contact is a two-way road to better understanding. But recent events convince me that the gulf between the Polish government and scientists is wide, and any improvement in personal attitudes which may result from living and working in the United States will not alter Warsaw's official policy. Persecution of Polish intellectuals and scientists and refusal of visas to American scientists of Jewish origin mock our program of scientific exchange. It is a further mockery that Poland invites the United States to Warsaw to discuss peace in Vietnam at the same time it closes its borders to our citizens. We should not continue to be partner to this hypocrisy. Our National Academy of Sciences should discontinue further exchanges until such time that freedom of opportunity for all Poland's intellectuals and scientists is reestablished.

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Detrick Symposium Dissent

We feel that the readers of *Science* would be interested in the reasons that a minority of the members of the governing board of the American Institute

A point of view on

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349 E. Howard Ave., Des Plaines, III. 60018 U.S.A. Donker Curtiusstraat 7, Amsterdam W. of Biological Sciences had in refusing to support the executive committee's agreement for cosponsorship by AIBS and Fort Detrick of two symposia ("Detrick birthday: Dispute flares over biological warfare center," 19 Apr., p. 285).

These symposia, honoring the 25th anniversary of the establishment of Fort Detrick, were concerned with basic research in two fields: "entry and control of foreign nucleic acids" and "leaf abscission." These fields impinge on areas of importance to biological warfare research, which may be directed against civilian populations, and over which scientists have no control. The reasons for our action were as follows:

1) It is not appropriate nor proper for an organization representing a large segment of the biological community to actively participate in a celebration honoring 25 years of biological and chemical warfare research.

2) It is not proper for the AIBS to lend its name and prestige to this celebration indirectly conveying the impression that AIBS actively favors this aspect of Defense Department activity. Although AIBS in this instance is acting simply as an agent of Fort Detrick, not having participated in planning the conference nor exerting any control over the program, its sponsorship in this way can be construed as tacit support.

3) It is not relevant whether the symposium was involved with basic research problems in biology, whether the discussion was to be open or closed, or whether the published symposium will be available to the biological community or will be classified.

4) The essential issue is a moral one: should an organization composed of life scientists participate in an anniversary celebration of an installation concerned primarily with research for the purposes of biological and chemical warfare?

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... One thing is certain—it's too late for a scientist to merely boycott a meeting or two.... The only argument of any importance made by either side is, to quote Boffey's article: "Outside scientists should maintain contact with Detrick in accord with the principle of civilian control over the military." This compressed statement contains the essential principle. If you let students take over the campus, you'll get action, but who is held really responsible when the fires are finally put out?

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TV for Disadvantaged Children

The Children's TV Experiment ("News in Brief," 26 Apr., p. 401) described a program to begin in the fall of 1969 for teaching preschool children and aimed at "stimulating the intellectual and cultural growth of children—'particularly those from disadvantaged backgrounds.'"

What disadvantaged preschool child has a 1-hour attention span—and one which can last 5 days a week for 26 weeks? Should preschool children, whose eyes are not fully developed, be staring at focal objects for protracted periods? How many disadvantaged homes have TV facilities? How about disadvantaged rural children who do not have access to National Educational Television? Isn't this discrimination? Shouldn't an investigation of these factors be made before going ahead with a \$6- to \$8-million workshop plan?

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Eclipse of Jacob

To bolster the morale of the scientific establishment shaken by the flight of our young from physics ("Physics and the polity," 26 Apr., p. 396), I offer this singular thread of hope. In answer to a religious school exam question: "Name the three patriarchs," one of our brightest fourth-graders listed: "Abraham, Isaac, and Newton."

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21 JUNE 1968

Better Research—Better Teachers

Bresler in "Teaching effectiveness and government awards" (12 Apr., p. 164) concludes that "the faculty member who is interested in publishing and in acquiring funds for research and other means of personal development . . . is likely to be a better teacher." While we agree with this position, he has not provided an answer to the assertion "that research efforts by professors were destructive to the teaching functions of universities." He also has not replied to the fallacious expression that research energy directed toward improvement of instruction and helping students would make the professor a still better teacher.

Science is a process, a way of thinking, which cannot be transmitted from teacher to student by the enumeration of encyclopedic content but which must be learned by participation. Since every student cannot participate in a meaningful way, the solution must lie in his having contact with practicing scientists. When we substitute professional teachers, full-time introductory instructors, and teaching fellows we extend prep school training to the university. I expect that science is not unique; music is best taught by musicians, art by artists, and literature by writers. Surely the student does not pay his money and, more important, spend his time, to receive third- and fourthhand knowledge. He comes to the university to participate in the activity of scholarship, and scholarship is research, writing, thinking, discussing, and participating in the subject.

We deny the student and the financial supporters (taxpayer or alumni) their just due when we fail to provide an atmosphere where the student can participate in academia. When the burdens of the professor preclude his participation in scholarship, we are not using our very limited resources to provide appropriate university instruction. These burdens include oversized teaching assignments, too much committee work, pointless clerical and demanding money-raising duties. Do the burdens also include spending extensive amounts of time applying to granting agencies for money to support a program of scholarship compatible with the modern state of knowledge? DAVID L. JAMESON

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Model experiment with glycogen, glucose, sugar phosphates and adenosine phosphates on a column of DEAE-Sephadex A-25. (From Biochim. Biophys. Acta 74 (1963) 588, by permission of the autor)

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