

Entomological Society of America: A Vote Which Raises Advocacy Issue

The debate over the risks and benefits of the use of pesticides in American agriculture has centered on the laws and regulations which govern pesticide use, particularly on the activities of the federal Environmental Protection Agency (EPA) and its standard-setting role. To the interested public, the chief antagonists appear to be environmental activists pitted against growers and agricultural chemical companies in an unending series of hearings and court battles. Scientists in disciplines relevant to agriculture have been less visibly but no less directly involved, and the debate has been the source of persistent tensions within their disciplines and scientific societies.

These stresses are reflected in balloting currently under way by the members of the Entomological Society of America (ESA) to decide whether the organization should become a member of the Council for Agricultural Science and Technology (CAST). CAST describes itself as a "consortium of agricultural societies. It is an educational organization, not a lobbying group, and not a scientific society."

Established in 1972 as a nonprofit, tax-exempt educational organization with headquarters at Iowa State University, Ames, CAST draws on scientific societies for expertise in preparing the reports which are its principal product and on the agricultural chemical industry for a substantial portion of its budget.

Sharp opposition to ESA's joining CAST has arisen, with opponents drawn mostly from among academic scientists with primary interests in basic research. These ESA members argue that CAST is an advocacy group supported by the pesticide industry and that, therefore, it is unsuitable for a scientific society like ESA to affiliate with CAST.

The results of the vote will not be announced until 16 August. Whichever way the vote goes, however, it is clear that the issue has tapped strong feelings among ESA members. Robert L. Metcalf, a member of the National Academy of Sciences and a vocal critic of the proposed affiliation, is one of those who suggest that a decision by ESA to join CAST could prompt some members to consider secession from the society.

Controversy over affiliation with CAST has been fueled by a clash which developed this spring as a result of a CAST review of a report done on contract for EPA by a group headed by Berkeley entomologist Robert van den Bosch. Copies of the review found their way to the agricultural trade press. The resulting editorial comment, including personal attacks on van den Bosch, caused van den Bosch to complain that CAST violated the confidentiality of the peer review process. While the issues are by no means clear-cut, the incident has been cited by Metcalf and others in arguing against ESA's joining CAST. (The van den Bosch report and the controversy surrounding it will be the subject of another article.)

ESA, which now has about 7000 members, was formed in 1952 through the merger of two societies, the American Association of Economic Entomologists and the Entomological Society of America. The economic entomologists' group had been founded in 1889, essentially as an organization of entomologists working in the newly established agricultural experiment stations. The original Entomological Society of America, founded in 1906, was dominated by academic scientists primarily interested in basic research.

Merger for Mixed Reasons

The merger seems to have been effected for mixed reasons. There were strength-in-numbers, more-powerful-voice-for-entomology-in-the-councils-of-science arguments, and also practical considerations that a bigger financial basis would allow more ambitious society activities, notably a better publications program. At the same time, there apparently was a perception that, scientifically, things were moving fast in the field and it would be desirable to link basic research and applications more closely.

The merger was debated warmly and some dissidents in both societies apparently left the new ESA in high dudgeon. The divergent interests of the "pure" and "applied" entomologists are still reflected in the two principal journals of the society and in the six sections into which the society is organized. Polarizing issues have cropped up in the past,

most notably a long and sometimes rancorous discussion over whether a national register of entomologists should be established by the society. University scientists tended to feel that such a registry was unnecessary; entomologists working in the "field" generally saw the register as a way to bolster their professional credentials. But the register was accepted in 1970 and the sometimes uneasy alliance of scientists with diverse interests has continued as harmoniously as in most societies with similar mixed constituencies.

The question of ESA affiliation with CAST dates back to the founding of CAST in 1972. ESA was one of a number of societies invited to participate in CAST activities then. Societies belonging to CAST now number 17, the largest of which are the American Society of Agricultural Engineers and the American Society of Animal Sciences. Until last year, however, ESA had not taken action on the CAST invitation. The matter was brought up again before the ESA governing board last summer, and representatives of CAST appeared before the board at the annual meeting of the society last November. As a result, the board decided to put the question of affiliation to the membership through a mail ballot. There was a discussion of CAST at a plenary session of the annual meeting and pro and con statements on joining CAST were published in the March *ESA Bulletin*.

There, the case in favor of joining CAST was presented by the immediate past president of ESA, Kenneth L. Knight of the University of North Carolina. It was during Knight's term as president that the decision was taken to vote, but Knight made clear the moderate nature of his own support of the affiliation. He wrote that "frustration stemming from the seeming inability of agriculture and its supporters to be heard by the decision makers, has led me to hope that CAST can provide plant protection entomologists with an objective voice." Other proponents have argued that ESA can exercise direct influence to ensure CAST objectivity and effectiveness only by joining the organization.

The negative case was argued by James M. Witt of Oregon State University. Witt in his statement said that the principal questions to be explored were, "Is CAST an advocacy organization and, if this be so, should ESA join CAST?" Witt dismisses the claim frequently made by critics of CAST that the organization was created by the pesticide industry to combat environmental activism. Witt writes:

It does not appear that CAST had its genesis as a result of the pesticide industry inviting its formation to represent the industry viewpoint, as has been commonly supposed, even though they have given aid to CAST in important ways. CAST seems to have originated out of a concern in the American Society of Agronomy as to whether agronomic and agricultural sciences could be properly represented (since they were a distinct minority) by the only societal configurations available to present scientific judgments.

Witt, himself rather even-handed in his judgments, makes clear that he would have little objection to CAST if it were sailing under different colors. "If CAST were to identify itself as an advocacy group—advocating the presentation of the positive side of agricultural science, there would be no quarrel with them. That is a worthy and noble enterprise. The issue of ESA affiliation could then be examined in terms of the question of whether a scientific society would tend to diminish its (or its members) objectivity by joining an advocacy group. But since CAST lays claim to being totally objective, the issue of advocacy must be closely examined for it is a subtle issue with fine differences of degree."

The ESA board has moved cautiously on the CAST issue, making no recommendations to the ESA membership on whether to approve or reject the link. Sources familiar with board attitudes say that two issues have caused reservations on the part of board members—heavy financing of CAST by the pesticide industry and departures from conventional academic procedures in preparation of reports.

Of CAST's current budget of \$146,000, more than two-thirds comes from industry. Its officials say there was no alternative to industry support and that it takes considerable pains to insulate policy-making and report-writing activities from industry influence.

As for CAST's procedures in preparing reports, task force members are suggested by the CAST governing board, which is made up almost entirely of society representatives. A key role in the organization of CAST task forces and in the preparation of reports is played by CAST's executive vice-president, Charles A. Black, a member of the agronomy department at Ames, who still teaches but has given up most other duties for the CAST post.

In response to a question about the accusation that CAST task forces are "stacked," Black points to the process for selecting task force members.

Chairmen for CAST task forces are normally picked on the basis of recommendations by the board of directors, who also nominate scientists from the so-

CIA Research: Duckett Out, Dirks In

Carl Duckett, deputy director for science and technology of the Central Intelligence Agency (CIA), was replaced on 30 May because of poor health and what an agency spokesman describes as routine turnover among high officials following the appointment of a new director. However, there are indications that George Bush, who became director of CIA in January, was unhappy with the fact that Duckett had made a statement, to a CIA seminar, regarding Israel's possession of "10 to 20 nuclear weapons ready and available for use" which was subsequently leaked to the press.

The statement about Israel has never been publicly denied by agency officials. Discovering whether Israel possesses nuclear weapons has been a publicly stated goal of the U.S. reconnaissance effort for some time.

Duckett declined to discuss his situation except to confirm that he is on sick leave from the agency.

The new deputy director for science and technology—the highest ranking science job in the intelligence community—is Leslie C. Dirks, a 15-year veteran of the CIA's science and technology branch. CIA spokesman Dennis Berend declined to state Dirks' specialty or educational background, except to say that he is, "of course, well qualified for the job." Berend said that CIA policy is not to discuss personnel changes except for the director and the deputy director, the only two officials who are presidential appointees.

On 11 March, the CIA sponsored an evening seminar which included cocktails, buffet, and a question and answer period attended by some 150 members of the American Institute of Aeronautics and Astronautics (AIAA). The ground rules for the session have since been disputed. AIAA invitations said it would be "unclassified," but AIAA executive secretary James Harford said, "We were told not to repeat what was said, or which agency officials were present."

There was great surprise, then, when the *Washington Post* immediately reported that at the briefing, "senior officials" of CIA estimated that Israel has "10 to 20 nuclear weapons ready and available for use." The story was written by journalist Arthur Kranish, who attended as a member of AIAA.

The controversy over the remark caused Bush "great anguish" and "embarrassment" according to one official. Senator Frank Church (D-Idaho), who was investigating the CIA, hauled Bush before the committee for questioning about it, and later called the remark "the biggest goof in the history of leaks that I have ever seen." The *B'nai B'rith Messenger* quoted Israel's prime minister Yitzhak Rabin as commenting, "Israel is not a nuclear power." No one, however, seems to have issued a flat denial.

The source of the leak has never been named. However, two AIAA members who were present told *Science* that Duckett not only chaired the session but made the remark. None of the other agency officials on the podium commented on it. "They all just sat there looking blank," said one witness.

Several of Duckett's acquaintances insist that the remark is not the reason he left his job and that his ill health is the cause. Citing a heart condition, one says, "He has been on the verge of having to retire for some time." Another acquaintance says "Ninety-nine percent of this story is his health." Asked whether Duckett had in fact been sick recently, CIA spokesman Berend declined to discuss the health of any CIA employee.

Duckett directed the science branch during some of its more ambitious undertakings, such as Project Jennifer, the attempt to raise a sunken Soviet submarine in 17,000 feet of water in the mid-Pacific using Howard Hughes' ocean mining project as a cover. Intelligence officials say that Project Jennifer was as much Duckett's idea as anyone's.

The science branch was also responsible for designing the newest reconnaissance satellites and the heightened emphasis on gathering economic intelligence since the 1973 Arab oil embargo. A congressional staffer, otherwise critical of CIA, reflected a widely held view of Duckett's abilities: "He was very gifted in pulling people together in teams to work on difficult technological problems. He had a genius for that." His talents were more remarkable, say admirers, because he had never obtained a college degree.

—DEBORAH SHAPLEY

cieties they represent to serve as task force members. For task force members from disciplines not represented in CAST, Black consults the presidents of other scientific societies. When it comes to people on task forces he says, "if they are biased, it is because of the recommendations of the presidents of societies." In selecting subjects for reports CAST gives priority to requests from Congress and agencies like EPA and does a few reports on its own when the board feels a subject merits it.

Critics of CAST note as significant that the organization's reports do not carry minority views. Witt in his statement pointed out that it is CAST policy to exclude from task forces persons known to have extreme views on an issue "because they impede the progress of the task force." "This leads," writes Witt, "to a CAST viewpoint that spokesmen for minority viewpoints cannot expect to be represented because the report should reflect the majority view of the organization."

A major count on which CAST has

been faulted is the concentration on pesticide questions in its recent reports and the rarity of comment favorable to environmentalist views in these reports. Black says that the board thinks too big a percentage of CAST reports has been devoted to pesticides lately, but notes that the organization is responding to outside requests and that pesticides is where the heat is. CAST reports do not include recommendations, but CAST officials acknowledge that none of the reports on pesticides could be regarded as friendly to environmentalist stands.

The Environmental Defense Fund (EDF), itself an advocacy group on the environmentalist side, sees CAST as an adversary on pesticide issues. An EDF spokesman characterized CAST as "an organization made up largely of agricultural scientists far overreaching themselves by making statements on carcinogenicity" related to pesticides.

Black, whose specialty is soil fertility and chemistry and who has a reputation as a capable editor, provides straightforward answers about the CAST poli-

cies and operations. He is candid in saying that many agricultural scientists have reservations about environmentalists' actions and that CAST reflects these views. "Frankly, as agricultural scientists see it," says Black, "environmentalists are not sound. They're overlooking too many things. We point out the things they've overlooked."

Black rejects the suggestion that CAST is an advocacy group because it represents a particular point of view. For agricultural scientists, says Black, "It's what they understand as facts, not a point of view."

For ESA, as the current president Ray Smith of Berkeley sees it, the question posed by the vote is "how do you handle advocacy within a scientific society," when the membership is divided on the issue.

Most scientific societies do not have any broad doctrinal consensus and maintain unity by avoiding policy issues likely to test it. One of the interesting things about the ESA ballot on CAST is that it raises just such an issue.—JOHN WALSH

NAS Committee on Asbestos: Discovery of a Special Relationship

A cache of documents brought to light in a quite different context has produced evidence of the attempt by a large asbestos producer, the Reserve Mining Company, to gain access to the deliberations of a National Academy of Sciences committee studying the health effects of asbestos in the nation's drinking water. The committee member associated with the attempt resigned last month, at the academy's encouragement, after the documents had been brought by the government to the academy's attention.

The surrendered documents are evidence that a special interest had gained access to the committee's deliberations, received at least some written and verbal reports not available to the public at large, and planned to evaluate the material it acquired, possibly with a view to injecting its criticisms back into the committee. As for the academy, the episode indicates that, whatever the theoretical adequacy of its present procedures for bias screening, those procedures did

not in this instance operate as intended.

The documents are memoranda written by an attorney in the Reserve Mining Company's law firm to his superior. They were delivered to the Department of Justice in response to a court order arising from the protracted litigation between Reserve Mining and the government over the pollution of the waters of Lake Superior. The Department of Justice passed the memos to its client, the Environmental Protection Agency, which in turn presented them to the academy.

The memos, written by the company's attorney Raymond L. Erickson, report conversations with Paul Gross of Naples, Florida, a member of the Subcommittee on Particulate Contaminants of the academy's Safe Drinking Water Committee and a nonretained consultant to Reserve Mining. The memos record that, at his superior's request, Erickson "conferred with Dr. Paul Gross on May 5 and May 8, 1976, with respect to his participation in the subcommittee. . . . Dr.

Gross will be providing us with more information as to each of the individuals on the subcommittee in addition to copies of their draft reports which are identified and described generally in the attached two outlines [of the subcommittee's proposed report]. . . ."

According to another passage in the same document, "Dr. Gross will be providing us with the draft reports to be submitted by the remainder of the subcommittee members and we should have some opportunity to assist Dr. Gross in evaluating the contents of those reports." One possible interpretation of this passage is that Erickson planned to have the company's other consultants review the draft reports, so that Gross could channel their criticisms back into the subcommittee with a view to influencing its deliberations. Both Reserve Mining and the government are under order to advise the court of studies on the long term health hazards of asbestos in drinking water, and the academy's report will presumably carry some weight in the court's decision.

Both Erickson and Gross deny that there was any such plan, although their explanations of the passage do not exactly tally. Erickson told *Science* that the assistance to be rendered to Gross in evaluating the contents of the other members' reports was only his own comments