try's current proposal for a campaign of eradication against the boll weevil go back to the late 1950's. At that time less than $5 million had been spent by the federal government for research on the boll weevil, although by then crop losses and pest control costs attributed to the boll weevil totaled an estimated $10 billion. Delegates to the 1958 annual meeting of the National Cotton Council, the principal industry association, were soberly aware of the continuing crop losses, the high cost of controls, the danger of the weevil's developing resistance to available insecticides, and the possibility of this pest extending its range into the irrigated cotton fields of the Far West. They decided that the time had come to mount a major effort against the weevil.

The cotton industry, which includes growers, ginners, merchants, warehousemen, and manufacturers, does not lack political influence in the South, and, as one knows, the South does not lack potent representation in Congress. Accordingly, the government was not long in responding to the cotton council's fervent desire for a broad-based program of research looking toward better control of the boll weevil and, if at all possible, its eradication. By 1961, the Boll Weevil Research Laboratory had been built at Mississippi State University, and, since then, more than $21 million has been spent on eradication and control research, at the new laboratory and elsewhere.

A new strategy of integrated controls was emerging by the time this cotton council established its special Committee on Boll Weevil Eradication in 1969. That strategy would consist of these major elements:

- Normal in-season application of insecticides by the grower to control the weevil population.
- Repeated late-season insecticide treatments to kill as many weevils as possible before they achieve diapause, the state of hibernation essential to the insect's winter survival.
- Defoliation or desiccation of cotton plants before harvest and destruction of the stalks immediately afterward, the purpose being to deny the weevil a favored place to feed and produce one or more new generations.
- The deployment in the spring, prior to the weevil's emergence from diapause, of traps containing a sex attractant called grandlure.
- The release of sterile boll weevils, 100 to an acre, with the aim of preventing fertile matings by the few native weevils that have survived the diapause treatment and have not been drawn to the grandlure traps. Effective use of sterile-male release technique is possible only if the weevil population has been reduced to extremely low numbers, of, say, two weevils per acre.

The cotton council's committee on eradication concluded that this new strategy of integrated controls offered a way to eliminate the boll weevil, a conviction supported by the committee's technical advisers from the USDA and state agencies. These advisers included Knipling, who was then also science adviser to the administrator of the USDA's Agricultural Research Service; J. R. Brazzel, the entomologist in charge of methods development for the USDA's Animal and Plant Health Inspection Service; and T. B. Davich, director of the Boll Weevil Research Laboratory.

So it was that, by mid-1971, a pilot eradication project was initiated in an area of 25 miles radius in southern Mississippi, adjoining parts of both Louisiana and Alabama. Around this core area were delineated three buffer zones, 50 miles wide altogether. Inside the core area, which at the end of the test contained some 1890 acres of cotton, the full integrated control strategy was to be applied. Less intensive suppressive measures were used in the buffer zones although, except for the sterile-male release, all of the control measures were used in the inner-

Briefing

Vice President Ford Hears Scientists' Concerns

A group of scientists met briefly last month with Vice President Gerald Ford to express their concerns about the role of science in government. Though Ford made no guarantees, he impressed his audience as a careful and sympathetic listener who would not be ill-disposed toward science should he ever occupy the White House.

Ford is a busy man these days, and the group was not a little surprised that he found time to talk with them. "Not until a Secret Service man appeared to check us onto the bus to go to the Cosmos Club did we think that he would show," says one participant. The group was the Committee of Scientific Society Presidents, formed last year by Alan C. Nixon, past president of the American Chemical Society (*Science*, 27 July 1973). Nixon wrote a month ago to Ford suggesting he might meet with the committee. What may have persuaded the Vice President to accept the invitation was the rather considerable number of people whom the society presidents represent—some 300,000 scientists, according to Nixon.

The meeting, which took place for an hour and a quarter over lunch at the Cosmos Club in Washington, was off the record, and participants declined to go into the detail of what was said. It seems that the society presidents expressed the scientific community's sense of rejection by the administration, as manifested in the abolition of the Office of Science and Technology. Ford noted that he had had no hand in that decision. Members of the group also opined that there was not enough opportunity in government to translate science and technology into action, particularly with issues that require long-term planning.

The National Science Foundation, it was said, lies too far from the center of power. Some members advocated that all federal science programs should be reorganized in a Department of Science; others preferred the idea of a Council on Science and Technology similar to the Council of Economic Advisers.

Ford, it seems, kept his counsel on these matters but at the same time conveyed an impression of openness and informality in which it was easy for people to ask questions. "It was clear that he had a serious interest in the views of the group," says one participant.

ACS president Nixon was pleased at the success of the meeting and plans to hold others. "We will try to get people like Mansfield, Kennedy, whoever the next vice president is, Shultz, and so on," he said buoyantly.

The group included representatives of the AAAS, the ACS, the American Physical Society, the Federation of American Scientists, the National Science Teachers' Association, and the Coordinating Committee of Engineering Society Presidents.—N.W.