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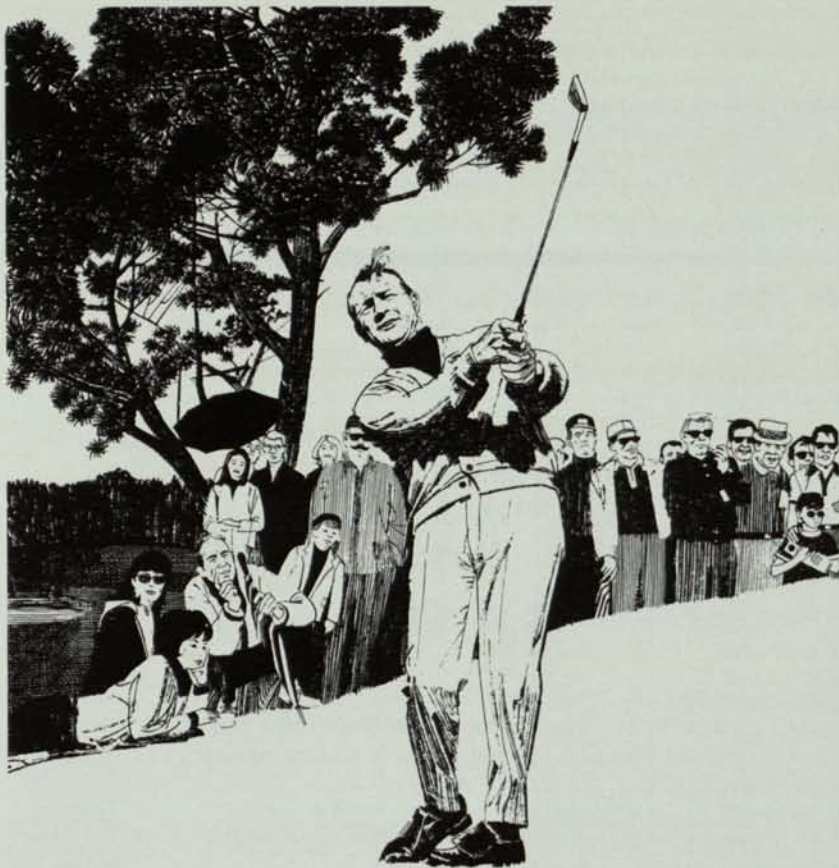
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DEATH-KNOLL FOR DDT IS BEGINNING TO SOUND

This spring Sweden became the first country in the world to ban the use of DDT and in the United States similar moves are being made in cities and states across the land. At the federal level too, serious efforts to outlaw DDT and similar persistent pesticides are beginning to stir.

The latest confrontation, and perhaps the most significant to date in this country is taking place in Madison, Wisconsin. Focal point of the action in Madison is a hearing being conducted by the Wisconsin Department of Natural Resources on a petition which could eliminate DDT in that state. The department is responsible for keeping the state's water resources free of pollution, and under state law it can, upon petition, restrict or ban the use of any substance it finds to be fouling the water.

Last November the resource department was petitioned by two local groups and the Environmental Defense Fund of Brookhaven, N.Y., to determine whether or not DDT is a pollutant of the state's water resources.

The Wisconsin hearings are significant since it is the first time that a proposed state-wide ban has been tested in court. If successful EDF and similar groups are expected to carry the battle to other states.

The first EDF witness was Wisconsin Senator Gaylord Nelson, who has sponsored a bill in the Senate to eliminate the use of DDT in the United States.

"The specific question before us", he said, "is whether the over-all benefits of DDT are offset by the damage it does. I think the evidence is clear that the damage is far greater than the benefit. In only one

generation we have contaminated the atmosphere, the sea, the lakes and streams and infiltrated most of the world's creatures. We are literally heading toward environmental disaster."

The first scientist called to the witness stand was Dr. Charles F. Wurster, Jr., chairman of EDF's Science Advisory Committee and professor of biology at the State University of New York. Wurster described some of his findings on DDT and warned of the infiltration of the chemical throughout the environments of the world and its damaging effects on a great number of non-target organisms. George M. Woodwell, chief ecologist at Brookhaven National Laboratory, says of Wurster, "I think, unquestionably, he knows more about persistent pesticides than anybody in the world."

Directing his comments toward DDT Wurster said, "DDT is much less effective than it once was because insects have become resistant to it, and we have learned many better ways of controlling them. Moreover, we now know that DDT is causing extremely serious damage to non-target organisms, and may not be as harmless to man as once was thought."

"The advocates of DDT attribute any harmful side effects to improper or indiscriminate use. But, in fact, there is no safe application of DDT in the external environment. Company propoganda makes DDT sound like baby powder but you can't have the controlled, discriminate use of a chemical that is inherently uncontrollable when released outdoors."

"DDT is carried by runoff waters into streams, rivers, lakes and oceans. It is also carried in large quantities through the air and it comes down in the precipitation of even remote parts of the world. DDT, therefore, cannot possibly be contained at the site of the application. Like atomic explosions, DDT cannot be used in the natural environment without contaminating the earth."

At the hearing Dr. Wurster outlined four serious disadvantages of DDT:

(1) It is what some scientists call a biocide; that is, it has broad biological effects on non-target organisms. It has been found in almost every living thing on earth. Tuna, hundreds of miles out in the ocean, carry DDT and so do animals on remote land areas.

(2) DDT has great persistence; its half life is at least 10 years and its potency lasts for as long as 50 years.

(3) It is highly mobile, though not very soluble in water. It goes easily into a state of suspension in water and will cling to small particles of matter, being then transported by wind, rain and snow. It is estimated that only half the DDT sprayed onto an area stays on that area. The rest is carried throughout the earth. This is why a ban, to be an effective ban, must be absolute.

(4) Not all the DDT ingested by animal or man is excreted. The DDT residues which remain in the body are stored in the fat tissue. As one animal feeds upon another, it ingests part of this DDT content into its own system.

Examples of how this concentration of DDT in living organisms has either killed outright or had sublethal effects on everything from plankton to mammals were given by a number of scientists.

For example, Kenneth Macek, staff biologist of the Department of Interior's fish-pesticide laboratory, reported of research findings that showed, when brook trout were fed low, sublethal doses of DDT, the eggs and fry they produced had significantly higher mortality rates. Also, the trout were more vulnerable to environmental stress such as changes in water temperature. Macek also cited research which identified DDT residues as the most probable cause of death of a million coho salmon fry in Michigan hatcheries.

And the list goes on.

Whatever the outcome of the Wisconsin hearings, the weight of testimony has already been felt throughout the state. The Wisconsin Department of Agriculture and the University of Wisconsin Entomology Department have formally dropped their approval of DDT for Dutch Elm disease control and scores of cities have already abandoned DDT in municipal spray programs. Without a doubt more will follow.

In neighboring Michigan, state agricultural officials decreed a prohibition on DDT and, as of this writing, were seeking the legal means to initiate a complete ban on the sale and use of the chemical.

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