L^{IKE} an arctic iceberg, the bulk of professional applicators, both members and potential members, were remotely obscure at the 11th annual International Pesticide Applicators Association convention in September. The reclusion of those absent only increased the enthusiasm of those present, however.

Unlike the iceberg, the meeting was anything but cold. While a warm autumn sun beckoned with weeklong shining rays, members resolutely turned their attention to the hotter issues confronting the custom applicator. Topics including legislation, public relations, weed control, biological insect control, operational safewas on the program. Considered a world authority of the issue of DDT, he brought the group up to date on the background of the DDT ban and explained in detail many of the inaccuracies and inconsistencies surrounding the testimony in the recent hearings.

One interesting point made during the lengthy discussion was that all living creatures have absorbed less than one-thirtieth of one year's production of DDT. That is after 25 years of production and six billion pounds of product, said Dr. Edwards.

In the area of association public relations, James A. Sample, editor, WEEDS TREES AND TURF magazine,

ty, and infra-red photography highlighted this year's meeting which was held in Portland, Oregon.

Keynote speaker, Fred C. Trullinger, president of the Charles H. Lilly Co., Portland, set a tone of caution optimism for the applicators early in the formal program. "Today there are an increasing number of people who want your services. The public has demanded an environment which is safe. The pesticide issue has created an awareness that all



APPLICATORS, INC.

chemicals should be handled carefully," he said. "You people represent a portion of the industry that has made tremendous strides in the past 20 years... Agricultural chemicals have done as much as anything in improving the environment for what it is."

Trullinger said that the two principle issues of the professional applicator today are to operate the business to receive a fair return on investment and to eliminate the danger of being legislated out of business.

He said that many applicators are concerned about the introduction of environmental protection chemicals in the future. The potential uncertainty of the use life of products on the market has caused widespread concern throughout the industry. "In today's climate," he said, "it is a battle to hold onto the present registrations." Pointing to industry, he said the National Agricultural Chemicals Association reports that 23 percent of the research and development budgets of the agrichemical industry is spent in maintaining registrations.

Additionally, he said it currently costs industry \$10 million to bring a candidate chemical from the test tube to the market place. "Let's face it," Trullinger remarked, "manufacturers are not going to invest \$10 million for a chemical that has a life of three or four years."

Trullinger concluded his remarks in noting that there is a need for: 1. more true professionals in this industry; 2. better profits; 3. better use of materials and methods of application; and 4. a united effort by all professional applicators.

The pesticide issue today was brought into clearer focus by an interesting presentation from Dr. J. Gordon Edwards, professor of entomology, San Jose State College, California. This was the second year Dr. Edwards focused attention on the exterior goals IPAA needs to develop. Calling it management of the public will, Sample said that as difficult as this job is, it is critical to the professional applicator. "IPAA needs more national exposure. It needs to use tools to enlist more support, or where necessary, weapons to oppose national legislation. It needs to develop national legislation. It needs to further its image," Sample said.

The magazine edtor outlined three

goals for IPAA which were later adopted by the board of directors. The first was a major feature article for consumers on the importance of the professional applicator to today's ecology-minded public. The second objective was to generate general publicity releases for consumer news media. The last goal involved the development of operational policy statements which could be used by applicators in the performance of their jobs and by the Association in testifying before legislative hearings and other official functions.

While attendance at this year's meeting totaled 145 with 59 actual members present, it was interesting to note representation by individuals from five states where active chapters have not been established. According to these people, there is concern is their states about pesticide legislation. They came to the meeting to associate and converse with industry leaders about specific problem areas. Of particular note was the extensive use of tape recording equipment. Conferees were anxious to record the program for their own use or for playback to groups of applicators who could not make the meeting.

During the second day of the convention Stauffer Chemical Company presented their famed "Miracle of the Land" audio-visual presentation. It clearly shows the role of agrichemicals in protecting the environment.

W. A. Harvey, extension environmentalist, University of California, Davis, next discussed the problems of weed control and the environment. He said the only reason for any weed control is to change the environment. Thus, when chemicals are use, the environment is altered. Herbicides, to be effective, must become an intimate part of the environment of the target plants.



issue.



Robert B. Black, industrial hygiene engi-neer, Health Division, State of Oregon, briefs delegates on operational safety. Dr. J. Gordon Edwards, professor of entomology, San Jose State College, San Jose, Calif. discusses the pesticide

However, if the herbicides moves away from the target or persists too long, problems arise.

The extension specialist pointed out that the effects of herbicides on living organisms have been negligible. True, the environment has been changed, but only because man has willed it. A prosperous, well-populated country is more likely to change the environment to meet changing needs. Herbicides have been a tool rather than a cause of environmental change, he said.

Another program speaker who discussed biological insect control was Dr. Sidney Siemer, Abbott Laboratories. He said that biological insect control includes viruses, rickettsiae, bacteria, fungi, protozoans and nematodes. Narrowing the subject to bacteria, he mentioned that that bacterial pathogens can be introduced and so colonized for long-term regulation and suppression of test species. "Bacterial pathogens can also be used in a manner similar to chemical insecticides for short-term or temporary suppression of insect pests. . . . For example, Bacillus thuringiensis has been successfully used for omnivorous leafroller and grape leaffolder control without creating any mite build-up problems or having deleterious effects on leafhopper parasites," he said. Once an application of B.t. is made to foliage, a general stoppage of feeding occurs in the first 24 hours, (Continued on page 27)

ITZEN BEACH

Dr. Sidney Siemer, Abbott Laboratories, Fresno, Calif., introduced the concept of biological insect control to IPAA members.



The 1973 IPAA board of directors are: (I-r, bottom to top) Ray Collier, Oregon (alternate); Bob Huntwork, IPAA vice pres., California; Don Mock, IPAA president, Washington; pres., California; Don Mock, IPAA president, Washington; Chuck Seibold, IPAA past pres., Oregon; Bill Owen, Oregon; Don Caldwell, Utah (director at large); Lew Sefton, exec. sec., Oregon; Ken Thorpe, recording sec., Oregon; Gary Mulkey, Oregon, Lew Crothers, Washington (alternate); Bob Skanes, Washington; Steve Fisher, Oregon; Milt Ellis, Oregon Cherector, Steve Fisher, Oregon; Milt Ellis, Oregon (alternate); Stan Raplee, Washington (alternate). Not present include: George Harrison, Jack Daniels, Mac Osborne, Alvin Wallman, Charles Bradshaw, Stan Taylor and W. R. Nahmens.



Don Mock (r) was elected IPAA president for 1973. Here, Chuck Seibold, past president, passes the traditional gavel to the new officer.



A banquet dinner was a highlight of the meeting. Shown here are: (I-r) Mrs. Steve Fisher, Mrs. Duane Saxton, Duane Saxton, and Mrs. Jerry Flowers.



DR. ROBERT E. HANNEMAN, JR., joined O. M. Scott & Sons, Research Division. He will be working in the seed production and seed research group at Salem, Ore.

JERRY L. ERICKSON, ROBERT L. LINDSEY, A. MILTON WALSH, elected vice presidents of Asplundh Tree Expert Company. Erickson will handle operations of the field management corps in western Pennsylvania; Lindsey will manage the company's tree trimming operations in most of Connecticut, all of New Hampshire and also oversees the underground work in Massachusetts; and, Walsh is charged with the management of all operations for the several utilities in the state of New Jersey.

HAROLD F. DEPUE, promoted to vice president of sales and marketing for Ackley Manufacturing Co.

GORDON A. BRANDES assumes the new position of manager of the Morris Arboretum following retirement from Rohm and Haas Company. The Morris Arboretum is part of Penn State University and is a 175 acre "museum of living plants" located in a suburban area of Philadelphia.

IPAA REPORT (from page 17)

but the insect remains on the foliage for some time.

Siemer said that biological compounds do not act as quickly as present insecticides. This is primarily due to the fact that the biological compounds control by stomach action causing a paralysis of the stomach muscles.

"Biological control is not magic. It will be used in conjunction with chemical control for many years to come, and even if it is successful in completely replacing organic chemical usage, it will require an extremely high level of technical competence on the part of all people involved," he concluded.

This year's program included topics for everyone. Of particular interest to the professional applicator was



A high pressure sprayer manufactured by Wayne Engineering Corporation was demonstrated for delegates by Rick French, western regional manager, and Herb Perrin, Schetky Equipment Corporation, Portland, Ore. . .

HERBERT V. KOHLER, JR., elected chairman of the board and chief executive officer of Kohler Co. He succeeds LYMAN C. CONGER who retired. Kohler is a grandson of John Michael Kohler, founder of the Company in 1873.

CHANCE HILL, JR., named director of parks for the City of Long Beach, California, following the death of **DON OBERT**, 67, who held the position since its inception in 1954. **WILLIAM T. BELL**, named assistant director of parks, the position vacated by Mr. Hill.

ROBERT P. KNUTSON, appointed operations manager of Bolens-Division of FMC Corporation, Port Washington, Wisconsin. He replaces **HOWARD L. McPHER**-**SON** who was promoted to manager of the Pomona, California operations of Wayne Manufacturing Company. Wayne recently signed a merger agreement with FMC.

ROBERT M. BOOK, named group vice president of agricultural marketing for Elanco Products Company, a division of Eli Lilly and Company. He succeeds **WIL-LIAM G. DAVIS**, JR. who was recently named a group vice president for Eli Lilly International Corporation.

a presentation on "Safety and Your Operation" by Robert B. Black, industrial hygiene engineer, State of Oregon. He cautioned members that much of the safety of application of pesticides rests on the user. "We must continue to stress personal hygiene and cleanliness," he said.

Black outlined in detail the four routes of entry of pesticide compounds into the body: dermal, respiratory, oral and through cuts or abrasions in the skin. He said that the dermal route is the most important in relation to applicators applying liquid formulations of compounds. "This route has undoubtedly been responsible for many poisonings of workers, especially where they were using organophosphates," he said. Recommendations of proper protective clothing, gloves, shoes and headgear were made. It could be concluded that this speaker's comments affected a greater number of applicators present and absent than any other presentation of the convention.

Also on the program was an interesting discussion of the use of infra-red photography in detecting disease, fire and insects in forests. John F. Wear, forester, U.S. Forest Service, said that this false color film has been used successfully in studies of soil condition, hydrology, and other areas of scientific endeavor. For the applicator, it holds potential in detecting disease and insect damage before the natural signs of stress appear.

A number of changes in the bylaws of IPAA were passed during the annual board meeting. These include a new dues structure to allow small groups to form local chapters. Also, one person in any state may now join IPAA as a member at large. The board also elected Don Caldwell, Salt Lake City, Utah, as a board member at large, a new position.

New officers of the Association are: Don Mock, president; Bob Huntwork, vice president; Ken Thorpe, recording secretary; and Lew Sefton, executive secretary and treasurer.