ASSOCIATION NEWS

COMMISSIONERS AND TRUSTEES BREAKFAST AT DENVER MEETING, MARCH 23, 1971

Presiding: Francis P. Creadon, Trustee, Desplaines Valley Mosquito Abatement District, Lyons, Illinois.

Editor's Note: Several members, including both trustees and directors, felt that the presentations made at this breakfast were of sufficient interest to be summarized for *Mosquito News* readers. Howard Greenfield, Manager-Entomologist of the Northern Salinas Valley Mosquito Abatement District, had a transcription made of a tape made at this trustees breakfast, and his secretary transcribed it. This transcription was sent to the Executive Secretary, T. G. Raley, who forwarded it to the editor.

From this transcription the editor made condensations of each contribution and submitted these to the original authors. The results of the authors' final review of the edited versions are printed below, with the exception of the contribution by Mr. Peters. Mr. Peters felt that the ideas behind his remarks had been sufficiently covered elsewhere and in other contributions, so that in the interest of conserving space he suggested that they be omitted here.

Current Problems in Mosquito Control, Suggestions for Solution and Responsibilities of Trustees in These Solutions

Don M. Rees

Member of the Board of Trustees Salt Lake City Mosquito Abatement District

The most important contribution towards the solution of problems in the District can be made by the manager of the District. The success or failure in solving the problems in mosquito control programs is largely dependent on the competence of the manager. A competent manager can not only solve problems that occur but frequently can anticipate what might develop into a problem and prevent its occurrence.

It is the primary responsibility of the trustees to employ such a manager. It is the most important function the trustees can perform in the successful operation of the district, for this results in the judicious expenditure of all district funds and the solution of the problems of the district.

The manager should prepare a program of general policies and operational procedures for the district. It is the responsibility of the trustees to review this program, revise where desirable, then approve with

the acceptance of the manager. This program is to be modified when deemed advisable but the manager should have full authority in the administration of the program, subject to support of the trustees as a board and without interference of individual members.

The manager should obtain support for mosquito control from all available sources. The manager should seek the assistance of influential board members to obtain this support. In some districts active support from available sources has doubled the amount of work that could be accomplished by the expenditure of the available budget of the district. In addition, some of these sources have specialists in some fields that, through their services, have greatly improved the effectiveness of the control program. Active participation in mosquito control has given these participants a better understanding of the objectives and problems involved in mosquito control. This participation also enlightens the manager and trustees about problems created by mos-

quito control for other interests.

Finally, it is the responsibility of the trustees to become well informed on the objectives, policies and operations of mosquito control at large and within their district. To accomplish this, a trustee's responsibility is greater than attending

a monthly meeting. I urge you to attend state, district, and national meetings conconcerned with mosquito control.

It is evident by your presence at this meeting that you are fulfilling the responsibility of your office as a trustee. Encourage other trustees in your district to attend meetings on mosquito control when possible, without always depending on convenience.

Coordinated Mosquito Control

Claude H. Schmidt *

Secretary, National Mosquito Control— Fish and Wildlife Management Coordination Committee

Yesterday, I spoke as a member of the USDA, but today I'm addressing you as a member of the National Mosquito Control—Fish and Wildlife Management Coordination Committee. In this organization we have tried to encompass all the different groups of people that should work together.

Our committee started about eleven years ago, in 1960. There was a real need for it in those times, because the groups concerned just weren't speaking to each other about problems of mosquito control. You had the fish and wildlife interests on one hand and those involved in mosquito control on the other; we just did not get

together.

The little brochure, "Coordinated Mosquito Control," has just been revised by our committee. Unfortunately, like so many things published these days, the brochure is already partly obsolete because the Environmental Protection Agency, (EPA) came into being just after the revision. Now we are talking with that agency to see if they would like representation on our committee, for I am sure that this is an agency we are going to be living with in the future.

The main objective of this committee is to coordinate mosquito control with fish and wildlife management policies at all levels-national, state, and local; but an even more important objective is to promutual understanding of problems and methods involved in mosquito control and in fish and wildlife conservation. And speaking of control the next revision of this little leaflet should perhaps do away with the word "control" and substitute the word "management" since this seems to be the "in" word these days. As you are aware, there are certain words in today's usage, such as preservation, drainage, and sprays, which are just like red flags. Mention them and you immediately get a reaction, often opposition. Some people just turn themselves off and don't listen anymore.

Another objective would be the encouragement of demonstration areas for controlling mosquitoes. Let's show people how this can be done without detriment to fish and wildlife resources, and, at the same time, develop public confidence and support for mosquito control programs and management projects. To get this support we have to do a much better job of educating the public.

Another objective is to stimulate research, and certainly we need more emphasis in this area. Unfortunately,

^{*} Mailing address: USDA, ARS, Entomology Research Division, Plant Industry Station, Beltsville, Maryland 20705.

because of the federal attempts to economize, funds are being cut at all levels—state, federal, and local. We are not doing all the needed research these days, and it's going to hurt us in the long run. This trend must somehow be reversed if at all

possible.

One thing we have done is to sponsor regional conferences and print the proceedings. We have had four of them in the past, and they are a very effective means of promoting the objectives of this committee. We had one in October 1970 in Coca Beach, Florida, in cooperation with the Florida Mosquito Control Association, and the committee has sponsored another one October 20–22, 1971, in New Orleans, in cooperation with the Louisiana Mosquito Control Association. The aim of these conferences is to get people to talk to each other about these problems.

Our group is, of course, a non-profit one operating on a shoestring. We have no source of funds except through the sale of conference proceedings and the brochure, and from donations from AMCA and some of the fish and wildlife groups. We are giving each one of you one of these brochures, free, but if you need, say 100 or 500 copies for possible use in your district, they are available at

four cents a copy.

To digress a bit, what do we mean by "coordinated control" or "coordination"? There are several meanings, such as the concept of being equal in rank or importance and acting together harmoniously or cooperatively. I am sure that all of you would like to act together cooperatively and harmoniously. But I'm not sure how many of you are willing to agree that mosquito control and fish and wildlife management are of equal importance. It depends on which side of the problem you are on. The fact remains, however, that we have to work together, and this means we have to compromise in some degree. As Bill Upholt pointed out a few years ago, many people are not willing to compromise—either because they are so set in their ways that they simply cannot see the other viewpoint or, on the other hand, because their enthusiasm for their own objectives is so intense that they believe any compromise is too expensive for the mere achievement of coordination. I believe that one of the main keys to this problem is communication. If we can communicate effectively, then we should be able to work together more effectively. Again, as Bob Vannote, first Chairman of this committee put it: "We cannot work apart and accomplish the same desired results."

We now recognize that in this day and age we have to work together. And in working together we can understand each other and learn about our common problems—our common interests. By pooling our knowledge and experience, we can work out many of the problems which sometimes seem insurmountable. One way to facilitate this is to make an effort to know the fellow in the other camp better; try to get to know him socially. It really helps. It's like greasing the skids. If you know your counterpart, you can do a much more effective job.

I would like to pursue this matter of communication just a little further. We must keep the channels of communication open between the different groups and interests. That this is very important is a foregone conclusion—almost all the other members of the panel have touched on some aspect of it this morning. To achieve true coordination in mosquito control, one must get down to specifics when discussing problems. Don't talk in generalities. Talk about a specific thing—something you can grasp. Otherwise you are just at sea; as is pointed out in this brochure.

One way this can be done, and I am not implying that it is the only way, is by developing common ecological guidelines for field practices. I believe that we have made great progress in this direction in the last few years. I am sure many of you can remember that about 15 years ago there was almost a total impasse between mosquito control interests and the fish and wildlife people. Since then, an excellent

dialogue has been developed in many areas of the United States.

One final point. These days it seems that the maxim of the age is "Let George do it." Unfortunately this is entirely too prevalent. You, in mosquito control, just

cannot afford to do this. You cannot keep on passing the buck. As Truman so aptly put it, many years ago: "The buck stops right here." You and I have to make the first step, for each one of us is "George."

123

Outlook for the Future in Pesticide Usage

Harold D. Newson

Entomology Dept., Pesticide Research Center Michigan State University, East Lansing, Michigan

In forecasting the future of pesticide usage, with respect to mosquito control there are many uncertainties due to the many kinds of people encountered in the operations. They can be classified roughly into two groups, those who want pesticides used, where they seem to be needed, and those who oppose the use of pesticides of any kind at any time, anywhere.

Scare headlines such as "Lake Michigan is dying"; "Blame DDT for death of a baby,"-and one could cite many otherslead to more and more restrictive legislation. We have to live with it, but if we can improve our communication and get the truth across to our legislators, the situation will improve.

We frequently hear about massive cutbacks in the manufacture of pesticides because of the fear of restrictive legislation, but statistics do not bear this out. There was a dramatic increase from 1965 to 1970 in the production of synthetic organic insecticides and about the same rate of increase is forecast from 1970 to 1975.

Breaking down the figures into statistics on purpose of use, for example, in three principal categories, household, agricultural and industrial, increases of about the same proportion are anticipated.

In the face of the widely publicized opposition to the use of pesticides, one wonders if this forecast can be true. It probably, is because, in agriculture and public health, as well as in other areas where we need insect control, we have become accustomed to getting better results each year. Just as most customers will choose clean apples before wormy apples, so most people will continue to approve the methods that produce the cleaner apples.

The use of pesticides has resulted in tremendous increases in agricultural production, and in the quality of the food produced. In spite of this, there are critical food shortages in many parts of the world, so that to the extent that the increased production is due to pesticides, it does not seem realistic to predict a cutback in their manufacture.

An improvement in health and a decrease in death rates in many parts of the world, especially in the tropics, have also been spectacular, and have resulted, to a significant degree, from the increased use of pesticides. Malaria control is only one of several conspicuous achievements in this field. The increase in well-being and productivity in regions where malaria control has been achieved certainly argues against a return to the pre-pesticide period.

In mosquito control, this is only one of a number of very positive achievements that form the background of our predictions on the continued use of pesticides. Effective control programs can be achieved only through a combination of good management practices. Pesticides need not receive the greatest emphasis, but they will surely remain a prominent part of these programs.

Public Relations in Mosquito Control Districts Glenn M. Stokes, Director Jefferson Parish Mosquito Control District Metairie, Louisiana

Public relations is the image that the mosquito control district projects to attract the public's attention. Support, cooperation, funding, and help will not be forthcoming unless there are satisfactory communications. The public must hear, must see, must remember, and must be satisfied with, the type of mosquito con-

trol program they receive.

The props in our district—the public relations "kit bag of tools," as it wereare many and varied. We employ 3' x 6' plywood signs with messages painted on them such as, "Mosquito Prevention Begins At Home," "Do You Cause Dog Heartworms by Growing Mosquitoes?, and "7 Days+H2O=Mosquitoes," which we place in strategic areas around the district. There are four such locations where traffic accumulates at traffic lights which have been chosen as maximum exposure areas for these signs. We have determined that after about 3 months exposure of the same sign the message is ignored. So we have seasonal messages and the signs are changed quarterly. Such signs make people think about their personal relationship to mosquitoes, we hope.

We have five portable folding exhibits. Each has a head board that is lighted. They are circulated throughout the district in schools, in courthouses (even where you pay traffic tickets), and in libraries. One exhibit pertains to our tools, such as light traps, spray equipment, and maps. Others cover other phases of our program. We have many audio-visual aids that we make ourselves. They include plastic, portable literature distribution stands which hold brochures on "Draining a Mosquito Breeding Area," and "Mosquitoes and You," etc., which are refilled periodically. We have an annual poster contest in grades one through six in all private, parochial and public schools, that now is in its fifth year. One of the local banks contributes \$150 in cash toward the sponsorship of this contest. As many as 10,000 posters are entered in a year. We feel these poster contests are valuable because the students have to do some thinking about mosquito problems and they even get a lot of help from their parents and their friends. In doing this they have to learn something about mosquito control. One of the winning posters from a couple of years back listed all the various types of breeding sites that are associated with an average backyard.

A good public relations program must be correlated with what goes on in the individual mosquito control district. If it is an urban mosquito control program, it must rely on urban type communications, such as, television. If it is a rural and urban program, it must be directed at both population segments. If it is strictly rural, that's the way the program should be tailored. But each particular

district will have different needs.

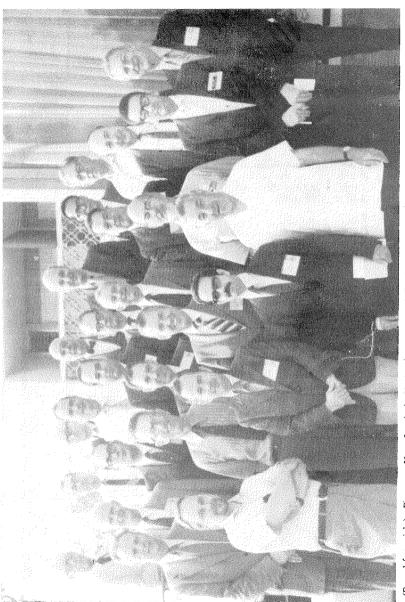
We find the school system is the best way to create and change the public image of mosquito control. The reason for this is that the school in itself is a learning environment. The teacher-pupil relationship in the classroom covers the period in which more learning takes place than at any other time in a person's entire life. There the student is expected to listen to the teacher. The teacher's sole purpose is to stimulate the minds of the pupils, and most parents send the children to school and see that they do their homework. Thus, when you can "sell" the teacher, as it were, on mosquito control and the value of learning something about mosquito biology and mosquitoborne disease, the chances of mosquitorelated topics coming up in classroom discussion are greatly enhanced. Then we introduce reasons to discuss mosquitoes through our poster contest, essay contest, and poetry contest, which we also sponsor annually among the higher grades. We encourage the use of mosquitoes in science fair projects. Thus we have receptive minds, willing and informed teachers, and reasons for studying mosquitoes.

We start with the primary grades and continue through the senior grades. We feel if we communicate one bit of information each year, we can communicate 12 bits of information in 12 years of school. And if "bits of information" are no more than, "female mosquitoes bite-males don't," "any artificial container around the home is a potential breeding area," "mosquitoes transmit dog heartworm," etc.-if we can transmit just this much information, we have got a better informed citizen. We feel they will make better homeowners and will be receptive to other information on the general subject of mosquito control because of exposure to the fundamentals.

Furthermore, in the student-particularly in the first, second and third grade

levels—there is a tremendous multiplier effect. If we tell this student—that young 6-year-old or 7-year-old something about mosquitoes, he or she will go home and tell the parents; if the parents don't listen at first, they will tell them over and over again. The parents have to listen, and by-and-large parents listen more to a 6-or 7-year-old than they will to a 15- or 18-year old. Also, the youngsters will tell their grandparents about it and they'll tell their friends, their next-door neighbors, their uncles, and so on. So this is an area we find to be very productive.

In this day and time, when the public is more conscious about ecology and the environment, your mosquito control program must have ecological and environmental compatibility. There will be a sizable segment of your district's public that will never be satisfied with an explanation if it is not compatible with a sound ecological and/or environmental approach. If the public cannot be assured of this compatibility of the mosquito control district's functions and activities, then you're fighting a losing battle in your PR program.



(From left to right)—First row: Hugo Jamnback, H. C. Chapman, Ernani Ferreira, Don Pletsch; 2nd row: James V. Smith, Jr., Herbert Schoof, Samuel G. Breeland, George Carmichael, Roy Elliott, John Stivers; 3rd row: A.W.A. "Tony" Brown, Freddy Gonzalez, H. Wade Fowler, Jesse Hobbs, James Kitzmiller, Luis Vargas, Herbert Barnett, John Belkin; 4th row: Ray Treichler, Martin Young, Clifford Lofgren, Robert Linkfield, Arnoldo Gabaldon, Donald Weidhaas, Su Yung Liu, Robert Babione. (AMCA breakfast in San Salvador.)