

OPERATIONAL SECTION

As announced in the March number the operational papers and notes will now be assembled in a "Section" to accommodate papers longer than the "Notes." The Section will continue to solicit also the smaller informal notes and comments which have been assembled by Bruce Brockway. Before the meetings in Chicago, Bruce expressed a desire to be relieved of this chore, and George Carmichael was appointed as editor of the section. However, encouraged by the suc-

cess of the "operational clinic" which he organized at the Chicago meeting (see page 246 of the Association News Section) Bruce has consented to try to organize a similar session for future meetings, and to continue as a member of the Operational Section committee for the News. To this committee in addition to Tommy Mulhern and Al Buzicky, Lyle Hagmann's name has been added, to facilitate coverage from the East and Northeast.

WHY, WHEN, AND HOW TO EMPLOY CONSULTANTS

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The governing boards of public agencies have various functions to perform. Of these functions the most important are the determination of policies, the planning and supervision of finances, and the selection of administrative personnel and special consultants.

Policies and finances are often governed by constitutions, laws, and statutes which provide for the establishment of public agencies to perform defined functions in particular geographic areas. These laws or statutes also normally provide for some form of governing body for each agency, which may be called a board or commission or council or some other appropriate name.

For the purpose of this discussion I will use the term "board of trustees," and the term "trustee" for the individual members of these boards, and will apply my statements more particularly to the boards of trustees of mosquito abatement agencies, since they are what we are interested in at this meeting.

Within statutory limitations, the principal function of the board is the establishment of policy, supported by sufficient supervision to assure that these policies are carried out. Frequently supervision of specific areas of policy, for example finance, may be made the responsibility of a com-

mittee of trustees. But usually supervision is delegated to an employed executive, who may have the title of manager or a similar designation. The board must select a manager who has competence, industry, integrity, and above all the ability to handle men and get the best out of them. It is his job to see that the board's policies are carried out, and it is the board's responsibility to see that he does so. This can be accomplished only when there is complete confidence between the board and its manager. And there must be a complete understanding of the functions of each, and a scrupulous care that neither invades the function of the other.

As I have said before on numerous occasions, it is never possible to find a manager who has all the qualifications desirable for the operation of a mosquito abatement agency. Some people believe that, since we are dealing with insects, the manager should be an entomologist. I have seen entomologists who have been failures as managers, as well as some who have been successful. I have also seen a few engineers who have been successful as managers, and some who have been flops. And I know some managers with no technical training who have been highly successful.

For these reasons it may be desirable to supplement the manager with persons who have special scientific training, skills, or experience. It may be necessary in some situations to hire a full-time employee, for example, an entomologist or a drainage engineer. With larger operations where considerable public funds are expended, it may be good management when specific needs arise to call in one or more persons with recognized competence in their fields to make a comprehensive analysis of the operation and make appropriate recommendations.

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² Just prior to his death on December 19, 1963, Mr. Gray prepared this paper for presentation at the 1964 Annual Meeting of the American Mosquito Control Association in Chicago.

There are many types of special skills, and knowledge which are applicable to mosquito control operations. Some of them are discussed in the following paragraphs.

LEGAL.—The need for competent legal advice is so obvious that it hardly requires discussion. Governing boards operate under state laws which prescribe their powers and duties. Their defined powers must not be exceeded; their duties must not be evaded. Someone competent in the law must be available as a legal advisor to the board and to the manager. In some jurisdictions a deputy district attorney may be available for advice when needed, but in others it may be advisable or necessary for the board to retain its own attorney for counsel as needed. Good legal advice will help to keep you out of trouble, as well as help to get you out if you inadvertently get in. Just any attorney won't do. By all means select a lawyer with some experience in public administrative law.

MEDICAL (EPIDEMIOLOGY OF MOSQUITO-BORNE DISEASES).—In tropical and semi-tropical regions the problems of mosquito control are so intimately related to disease that the operation will require the services of one or more medical specialists. In the United States today the medical problems are relatively minor, except for occasional epidemics. Usually the state health department has staff members who are available for consultation and who will help out in emergencies.

MEDICAL SERVICE TO EMPLOYEES.—Group medical-hospital insurance plans—frequently mis-called "health plans"—are available in many forms. Some of them are actuarially sound; others are possibly not. There are many insurance companies with various types of insurance. Considerable study will be needed to select the best type of insurance for district employees. Here the services of an independent insurance counselor can be of real benefit.

District employees seldom have sufficient cash reserves to pay for a large hospital bill; then they may wait weeks for their claim to be processed and a partial reimbursement check issued to them. For this reason it is better to have the type of insurance which pays directly to the hospital or to the physician.

A good medical hospital plan for employees and their dependents is an important factor in maintaining a secure and loyal group of employees.

ENTOMOLOGICAL.—Most districts will have on the employed staff an entomologist, particularly one skilled in culicidology. His primary duties are to ascertain the locations of mosquito production, and to determine the species present and their relative potential for effecting disease transmission and causing human discomfort.

Occasionally it may be desirable to have a review of the entomological operations to determine the effectiveness of the program and to provide assurance that new knowledge in this field is being adequately applied. The manager may wish

to know if certain procedures are no longer necessary, or he may want to know if the costs of specific entomological activities are justified by the results.

For this purpose a more experienced entomological consultant may be necessary. Sometimes the state or provincial health department has such a person who may be called in to conduct such a review. In other cases a university may be able to furnish such a person, usually for a fee.

ENGINEERING.—The engineering problems of a mosquito abatement district are usually relatively simple and seldom require the services of a professional consulting engineer. Where extensive drainage projects are planned, these are usually managed by a drainage district or a reclamation district. Almost all of the engineering work of a mosquito abatement district (design, surveys, etc.) can be provided by an engineer who is a regular employee of the district. If the district does not employ a civil engineer, needed surveys can be made by a local surveyor on a fee basis.

FINANCIAL PLANNING.—It is helpful to have a broker or an astute business man on the board of trustees to assist in planning the finances of a district. If no such person is available, it will be well to seek professional advice from time to time as needed.

Financial planning should be projected several years into the future. The manager should plan the projects in necessary detail, analyze their costs, obtain approval from his board of trustees, and then proceed to work from this plan.

It is usually advisable to have a relatively stable tax rate. You can explain abrupt increases all you want to, but it doesn't improve public relations. It is a good idea to set up reserve funds which can be drawn upon in years when there are large capital expenditures for major projects. The manager must be thoroughly familiar with the state or provincial laws on this subject in order to avoid difficulties.

Usually mosquito abatement districts are not authorized to issue bonds, but they may borrow money on short term notes. It is not advisable to borrow money if this can be avoided.

ACCOUNTS AND RECORDS.—Accounts and records will ordinarily be kept by an administrative assistant to the manager. These accounts should be examined at least annually by a certified public accountant or equivalent, and an audit report made and published.

The state laws usually prescribe in general, and sometimes specifically, what accounts are to be kept. Sometimes the county auditor is charged with supervision over the accounts of districts, or with an annual or more frequent audit of these accounts.

Almost always it is desirable for a newly-formed district to retain a certified public accountant to set up forms and outline the necessary fiscal procedures for the district. If the accounts

are properly planned, trouble will be avoided later.

If the county or parish auditor is charged by law with the auditing of district accounts, the employment of special auditing services is seldom needed. If not, then it is a protection to the board of trustees and the manager to have an annual audit. Publication of the audit or making it available in a widely distributed annual report is good public relations. Don't waste money on a cheap audit; it is wise to obtain a reasonably thorough audit made by a firm with an established reputation for competence and integrity.

INSURANCE.—Districts are subject to a wide range of possible liabilities for their actions; they therefore need comprehensive and adequate insurance to cover all conceivable possibilities. In addition to such coverage as automobile, fire, theft, malicious mischief, and workmen's compensation, general public liability is an important consideration.

The district, the board of trustees as a board, the individual trustees, the manager and every employee should be covered by a comprehensive public liability insurance policy in adequate amounts. The total amount of the coverage will depend on the type of operations, the equipment and materials used, the population density, and property valuations.

Here is where a competent insurance counselor can be of real help. Pay him well for his services; they will be earned. Don't just arbitrarily set up the amounts you think are adequate and then peddle the policies among a few friendly brokers.

RETIREMENT PLANS.—If you want a loyal working staff which will want to serve your organization as a career, the employees must have a feeling that they are not just names on a payroll, but individuals in whose welfare the trustees are interested. One thing which will contribute to this loyalty is an actuarially sound and reasonably adequate retirement system, supplemented by medical-hospital insurance and possibly by group life insurance.

If the state, province, or federal government has such a retirement system, it is usually preferable to contract to become a part of such system. In California, it was necessary to amend the State Retirement Act to make this possible; this may be true elsewhere. If true, legal or actuarial advice should be sought.

PERSONNEL MANAGEMENT.—The best personnel relations result from good working conditions, plus a mutual understanding and respect between the board, the administrative staff, and the employees.

However, at times there may be grievances resulting from minor irritations or ill-advised actions. In such cases, if these cannot be resolved by mutual agreement within the organization, the employment of a specialist in personnel

relations may be helpful. He is sometimes called an "arbitrator."

PUBLIC RELATIONS.—The best public relations result from a job well done. But the public must be kept informed as to what is being done, and why and how. This can be accomplished in many ways and by using a wide variety of media.

Here is where an effective and experienced public relations counselor can be of help, partly in outlining the types of publicity applicable, and partly in training district employees in the use of various media and in the development of specific skills applicable to working with individuals and groups. The attitude of employees toward the public can make or break the reputation of an organization.

I will illustrate by one incident which happened to me years ago when I was manager at the Alameda County Mosquito Abatement District in California. A gentleman came into the office wanting a variety of information about mosquitoes, flies, and other pests. I took time to answer his queries and gave him references from which he could obtain further information. Finally he said, "I have been in many public offices seeking information, but you have taken more time and shown more patience in answering my questions than I have experienced anywhere else. I certainly appreciate this." "Well," I said, "you are paying my salary, are you not?" He replied, "I never thought of that." I answered, "I never forget it!"

HOW TO RETAIN CONSULTANTS.—A consultant is a person of thorough training and considerable experience in his field, whose opinion and advice are respected by his professional brethren. He is not an employee, though you may retain or "employ" his services. His compensation is on some type of "fee" basis, which may take several forms, according to an agreement entered into by the trustees and the consultant. This fee may be a definite sum of money in total payment for a particular service, usually in an agreed period of time. Another type of fee is on a per day or per hour basis, with or without a maximum number of days or hours to complete the study and report. The type of fee is a matter for negotiation, according to the requirements of the district. But don't try to bargain with the prospective consultant. He usually has a schedule of fees, based on his knowledge and experience. Here is where the laborer is worthy of his hire.

You do not retain a consultant on the basis of competitive bids, nor do you advertise for such services. The best method is to find out from professionals in a particular field which men are generally considered to be outstanding or unusually competent. Discreet inquiries among physicians, for example, will disclose which practitioners stand high in the estimation of their fellows and could best provide the specialized services needed. In the same manner it will be possible to locate excellent engineers through in-

quiries among other engineers, or entomologists through other entomologists, etc.

From these inquiries it will be possible to select several potential candidates who seem to be qualified. The backgrounds of these individuals can then be discussed by the board of trustees and a preferred selection made. When this has been done the candidate of choice can then be invited to discuss the project with the trustees, and a schedule of work and a schedule of fees and expenses agreed upon. In this discussion the trustees will have the opportunity to consider the personality of the consultant under consideration. This is important, for regardless of his professional stature or his unique technical skills, an unpleasant personality may endanger good relations with either the trustees, or with the employees of the district with whom the consultant must work.

The agreement should be drawn up carefully and in such clear terms that there is no possibility

of misunderstanding. It is usually advisable to have this approved as to legality and form by the attorney for the district. If a written report is desired, this should be specified.

Do not be hasty in retaining a consultant. Take sufficient time to be certain that you have a thoroughly qualified man. Once you have made the decision, see that everything possible is done for his convenience and to expedite his work.

The report or advice of the consultant is not binding upon the board of trustees. The board may accept all the recommendations, or part of them, or reject them en toto. But if there is disagreement with the consultant's recommendations, be sure that there are valid explanations for decisions ultimately reached by the board. Above all, since you will have paid good money for the services of your consultant, don't put his report away in a file and forget about it.

A WEED-BURNING ATTACHMENT FOR AN INSECTICIDE MIST BLOWER

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Weed control, as an adjunct to mosquito control, is often conducted as a wintertime project when larviciding equip-

ment is not in use. In consideration of such a work schedule, the Colusa Mosquito Abatement District has developed



FIG. 1.—Weed burner mounted on mist blower.