

Vertebrate Pest Conference Proceedings collection
Proceedings of the 2nd Vertebrate Pest
Control Conference (1964)

University of Nebraska - Lincoln

Year 1964

THE ROLE OF PEST CONTROL
OPERATORS IN VERTEBRATE PEST
CONTROL

Philip J. Spear
National Pest Control Association

THE ROLE OF PEST CONTROL OPERATORS IN VERTEBRATE PEST CONTROL

Philip J. Spear

National Pest Control Association 250 West
Jersey Street, Elizabeth, New Jersey

I am pleased to participate in this Second Vertebrate Pest Control Conference and to bring you some comments on the role of pest control operators in vertebrate pest control.

Those attending this conference know very well what a vertebrate pest is. For the record, however, I will use the definition provided by Dr. Walter Howard, General Chairman of the First Vertebrate Pest Control Conference. He defined a vertebrate pest as, "any native or introduced wild or feral non-human species of vertebrate animal that is currently troublesome, locally or over a wide area to one or more persons, either by being a health hazard, a general nuisance or by destroying food, fiber or natural resources."

Now let me tell you something about pest control operators, or Pico's as I shall call them, and their national trade association.

Pest control is a service business. Most of the PCO's work is carried out in, around or for the protection of structures including, but not limited to residential, farm, commercial, industrial and public buildings, bridges, utilities, statues, ships, wharfs, sewers, and even missile sites.

The National Pest Control Association, which I represent, accepts for membership those persons or firms which are actively engaged in the performance of structural pest control services for hire to the public at large and which are in sympathy with the purposes of the Association. The pest control operator in this context might be called a commercial pest control operator to distinguish him from those doing similar work but who are employed by governmental agencies or within large commercial organizations.

Pest control is a growing industry with a gross annual income of 300-350 million dollars. It is estimated to contain more than 5,000 firms employing about 25,000 productive workers. Many of these servicemen, possibly 15,000, are doing vertebrate pest control every day as they combat commensal rodents. A much smaller number, usually specialists or persons normally doing supervisory work, are also engaged in the control of pest birds and a variety of miscellaneous vertebrates. With approximately 15,000 servicemen making at least 10 contacts a day with the public, it is readily apparent that whatever opportunity the general public has to judge the success or failure of vertebrate pest control practice is largely influenced by the work of the pest control industry.

Most of those attending this conference are engaged in research, extension or operational pest control work for governmental agencies. As will be pointed out later, we have urgent need for the work of research and extension specialists. Also, our pest control industry must recognize that there are vertebrate as well as invertebrate pest control problems that are best handled by agencies. On the other hand, we ask equal recognition of the fact that business is essential to the economic health of our industry. As our Executive Secretary, Dr. Heal, has already stated, "We would request your

realistic recognition that our pest control industry is business. We must operate at a profit to stay in business. Before there can be profit, we have to pay our employees, buy our equipment, pay our office rental, provide telephone service, secretarial services, advertise our wares, provide transportation and pay our insurance. We recognize that many requests come to agencies from the public for an estimate of a fair cost for a pest control job. We only ask that any estimate that you offer be made with a full recognition, not only of the cost of doing business, but that business must have a profit to keep our economy alive."

The items which contribute to the cost of a pest control job and the relative importance of each are shown below. They are based on reports submitted this year from 80 firms in California. The basic figure, and the one that is easiest to estimate, is the cost of labor.

In California the average labor rate is \$3.13 per hour, but since, on the average, servicemen produce income only 6.2 hours per day, the productive hourly rate is \$4.00 per hour. On this basis, the various items entering into the cost of a pest control job requiring 1 hour's labor in California are as follows:

| | <u>Percent of Gross Income</u> | <u>Amount in Dollars (rounded)</u> |
|-----------------------------------|------------------------------------|--|
| Direct Costs | | |
| Labor | 32.0 | 4.00 |
| Material | 9.9 | 1.25 |
| Indirect Costs | | |
| Automobile and Travel | 5.3 | 0.65 |
| Building Overhead | 2.6 | .30 |
| Equipment Overhead | 3.2 | .40 |
| Indirect Overhead | 7.0 | .85 |
| Supervisory Salaries | 7.3 | .90 |
| Sales and Advertising | 4.7 | .60 |
| Office and Administrative Expense | 6.6 | .85 |
| Returns | | |
| Executive Salary | 12.6 | 1.60 |
| Profit | <u>8.8</u> | <u>1.10</u> |
| TOTAL | 100 | 12.50 |

The pest control operator may engage in a variety of types of business. The most common one is general pest control. Commensal rodents belong in this category along with a variety of common invertebrate pests. In another NPCA survey taken last fall, members were asked to name the pest which was the greatest problem to them. Vertebrate pests fell far back in this "unpopularity contest." The leaders were roaches which received more than 100 votes. They were followed by ants, termites, brown dog ticks, earwigs and silverfish. The highest ranking vertebrates were rats with 6 votes and pigeons with 4 votes. There were but 2 votes each for bats, low bidders and Rachael Carson. Single votes as pest-of-the-year went to moles, chipmunks,

squirrels and the tax collector. Thus, although rats and mice, along with roaches and termites, are the "bread and butter" items in the business of the PCO, he has relatively little difficulty in providing satisfactory control of the rodents.

Control of vertebrates other than commensal rodents represents only a small amount of business but a large number of "headaches." Calls for control of these miscellaneous pests are so infrequent that it is not practical to develop routine service procedures. These miscellaneous pests (excluding birds and commensal rodents) are, in decreasing order of importance: bats, skunks, moles, snakes, squirrels, chipmunks or ground squirrels, racoons, rabbits, opossums, feral cats, pocket gophers, wood rats, deer, toads, cotton rats, prairie dogs, kangaroo rats, nutria and frogs.

Bird control has grown like Topsy in the last 6 to 8 years. Many operators have done a few experimental jobs in bird control, a few firms have substantially increased their income and their service to clients through bird control, but a large number of PCO's are still reluctant to expand into this new work. Their hesitancy is prompted by problems in public relations, by the lack of generally acceptable and satisfactory control techniques, and by the expense of the specialized labor and equipment which may be required.

Some persons have gotten the impression that bird control can be done by magic and without cost. Possibly they have been reading some newspaper accounts or have seen the benefits of experimental or demonstration programs. When realistic prices have been quoted to them, they have concluded that the annoyance they have complained about has suddenly become "bearable."

With the foregoing as background, we can now discuss the role of the PCO in vertebrate pest control.

Pest control operators encounter thousands of vertebrate pest problems .daily. Members frequently seek the assistance of the NPCA staff on difficult problems. When such problems fall into patterns, developments can be recognized which might escape the attention of isolated observers. Thus, because members have so many daily exposures to problems and because their experiences can be related through their national trade association, an informal but useful surveillance network is available to supplement work of this nature by official agencies.

Surveys are another means by which the industry develops useful information for itself and others. Periodic surveys show trends in the relative importance of pests controlled and materials used. Last year the members of our Rodent Control Committee were asked to list the rodenticides used in relative order of importance.

When the survey was summarized, an index was established by giving a numerical value of 10 for first choice rodenticide, 9 for second choice, 8 for third, and so on. With 29 reports, 290 points, of course, would indicate first choice by everyone. Following is a list of rodent control materials in order of preference, based on the index figures:

| | | | |
|---|-----|------------------|----|
| Anticoagulants | 287 | Traps | 59 |
| DGT Dust | 187 | Red Squill | 27 |
| Zinc Phosphide | 133 | Adhesives | 25 |
| Calcium Cyanide | 107 | Antu Dust | 21 |
| 1080 | 106 | Antu Bait | 17 |
| Phosphorous Paste | 98 | Aldrin Dust* | 15 |
| Strychnine | 77 | Rotaban* | 10 |
| Arsenic | 72 | Dieldrin* | 9 |
| Thallium | 63 | Barium Carbonate | 1 |
| *Indicates product is not federally registered for sale for rodent control. | | | |

Of the 29 operators responding:

8 are using molded baits 16 are using throw bags 23 mix some of their own baits 28 use bait boxes; 1/2 regularly; 1/2 only in special situations

Our Bird Management Committee also conducts surveys which show trends in bird control problems, methods and materials. In 1962 they accumulated considerable information on the history and size of established bird roosts. These records were submitted for use in the studies of histoplasmosis being carried out by the U. S. Public Health Service under Dr. Michael Furcolow of the Kansas City Field Station.

Research is not a part of ordinary pest control operations. We look primarily to governmental organizations and to chemical manufacturers to supply new techniques and materials. Recently, however, our industry has made a small beginning toward the support of research of interest to pest control operators. Monies contributed by members and friends to the NPCA Research Fund support several small investigations mostly related to insect control. In each case no more than a few thousand dollars a year are involved, but this provides useful aid to a graduate student.

The NPCA Research Fund has supported only one project in the vertebrate pest field. In this project Dr. William B. Jackson of Bowling Green State University made several field trials of experimental formulations of Bayer 29493, a contact toxicant for bird control. The preliminary results indicate that, successful control of pigeons and English sparrows can be achieved. It is believed that the hazard of this use of Bayer 29493, an organic phosphate, is less than that created by similar use of chlorinated hydrocarbons such as endrin.

We invite other researchers to propose or to discuss projects involving vertebrate pests. Those dealing with the control of commensal rodents or pest birds are especially desired. Proposals are reviewed by the NPCA staff and by our Technical Council.

The Association also maintains contacts with universities, Federal agencies and commercial concerns for the purpose of bringing to the attention of researchers and administrators the industry's needs for safer and more efficient toxicants, repellents and techniques.

The past 12 to 18 months has seen considerable activity in the rodenticide field. We have provided marketing and use information to several manufacturers of promising new compounds.

When a new pesticide has progressed far enough that an experimental label has been obtained, field tests can be arranged through our Bird Management or Rodent Control Committees.

For field tests to be conducted by Association committees, the sponsor is expected to provide ample quantities of experimentally registered pesticides directly to the 30 to 50 committee members. Directions for test procedures and reporting are developed jointly by the sponsor and the Association staff and often in consultation with staff Biologists of the Pesticide Regulation Division, USDA. Reports are submitted directly to NPCA. Copies or summaries of the reports are relayed to the sponsor, but only for the information of the personnel of the sponsor's firm and are not to be used in promotion or sales.

Technical Releases may be issued on pesticides of interest to PCO's at the time such chemicals are registered for sale, become commercially available or undergo substantial change of status with respect to availability and use by PCO's. Ordinarily, such releases are prepared with the assistance of technical personnel of the sponsor. Reports of practical field tests by NPCA committees are also used as are any other available sources of authoritative information. Technical Releases covering registered products may be reproduced for, and supplied to the sponsor by special arrangement with NPCA.

Through committee or staff work or both, the Association also develops statements of Good Practice in Pest Control. Our Approved Reference Procedures for Subterranean Termite Control and our Good Practices for Fumigation are widely used. Their success has stimulated a demand for similar statements for other fields. Good practice statements for some aspects of rodent control are in preparation.

Good practice statements have wide usefulness and permit flexibility and the use of judgment when they are applied to a specific problem. We feel that minimum standards, on the other hand, have serious limitations. If strictly adhered to, much of the buying public will have less than it should have. If not strictly enforced, a minimum standard becomes more of an "optimum" to be circumvented -- usually at the preference of the property owner.

Safety in the use of pesticides is essential in a discussion of the role of the PCO in vertebrate pest control. The use of pesticides in residences and other structures contributes to many accidents to property, pets and even to children. The pest control operator has a good record in this matter, and it is to be expected in view of his experience, his specialized training and his need to protect his business reputation. I do not mean to imply that we are lily-white. Pest control operators do get involved in accidents and the increasing cost of insurance as well as bad publicity is of real concern to them.

In the past, our industry had a record of being prone to deviate from standard usage of pesticides. Old-time exterminators were rugged individualists who prided themselves on their secret formulas, but this attitude is rapidly disappearing. As a businessman, the modern pest controller knows he is better off to use well-known toxicants in a manner that is generally recognized as safe and acceptable. Even now, however, it is difficult to find all the support we feel is desirable for certain products used in vertebrate pest control.

The labeling of products under the Federal Insecticide, Fungicide and Rodenticide Act has given us a useful guide to the correct use of insecticides and rodenticides. Our members have given an excellent reception to our increasing pressure on the need to "Read and Follow the Label." The Federally registered label is useful as a readily available and understandable guide. In addition, the pest control operator who follows the label instructions finds he has a valuable "umbrella" in the event of trouble. It is a bulwark of defense in this time of publicity about the hazards of pesticides and when the public is increasingly prone to file nuisance claims or even to try to get something for nothing.

Nuisance claims generally dissipate when a pest control operator can substantiate that his uses of pesticides have been according to the manufacturer's directions and that these directions are a part of labeling registered by USDA. Actual accidents are rare when pesticides are used in accordance with directions on properly labeled products.

Our campaign to get PCO's to "Read and Follow the Label" has not been fully accepted as yet. Progress is very encouraging but there are some problems still to be overcome. There is little difficulty in the use of rodenticides, but there is a marked shortage of products registered for control of birds and occasional vertebrate pests. Even such a well established practice as the use of strychnine in bait for bird control is not yet covered by registration. We hope that such labels can be requested by manufacturers or, if they cannot be persuaded to do so, by some official agency. We will be glad to assist in the preparation of the necessary supporting information. Until such labels are available, we shall be guided by long accepted recommendations of the Fish and Wildlife Service.

Protection of health and of property, the safe use of pesticides and the communication of accurate, useful information to the public are among the purposes of NPCA to which a substantial portion of responsible pest control operators are dedicated. These are also the goals of official agencies concerned with vertebrate pest control. Thus the agencies of government and the PCO's as representatives of the business community have much in common. Industry wants and needs the help that official agencies can give through research, inspection, enforcement and education of its workers as well as the public.

Despite our common desire for better service to the public, there are a number of stumbling blocks in our paths. I would like to give you a frank review of some of these problems or misunderstandings as seen by PCO's.

One of the PCO's most perplexing problems is to obtain the customer's recognition of the importance of sanitation. The PCO is often placed in the position of trying to do with chemicals what the customer should do with cleaning tools and efficient property management. Pests cannot be controlled efficiently with chemicals alone when their environment has an abundance of food, water and shelter. This is a fact that pest control operators face daily in crowded city slums, in parks, in stockyards, in grain terminals and even on the grounds of luxurious suburban residences.

The pest control operator can explain and remind about the advantages of sanitation, but he can't be expected to enforce it or to sell it to the owner of a property in an area where property owners and tenants are neither interested nor required to maintain reasonable sanitary standards. Where sanitary standards are enforced, however, the PCO can do his job efficiently and finds demand for inspections and consultations in which he can make rewarding use of his knowledge and skills.

In food plants subject to inspection by the U. S. Food and Drug Administration, enforcement of strict regulations is carried out by rigorous inspection and by publicity. Pest control services of high quality are in demand in such plants. Furthermore, there is increasing demand for inspection services to supplement as well as to check upon the sanitary inspections and practices of plant personnel. Such inspections by specially qualified personnel of pest control control firms are usually restricted to those aspects of property management, good housekeeping and product care that are related to pest prevention and control.

Rodent control alone, or as a part of general pest control, often is carried out at public and private institutions in a shoddy manner and at low prices. This unfortunate result of low bidding occurs more often than we would like to admit. Responsible PCO's say they will not stoop to such work and that public agencies should write practical but effective requirements into their contracts and then provide strict enforcement. Public officials tend to interpret such shoddy work as characteristic of the industry. Everybody loses - the public gets poor service, management does not get what it wants and our industry is frustrated. It is our belief that these difficulties can be substantially reduced by strict enforcement of reasonable contracts.

Misunderstandings arise in many ways: Pest control operators see official agencies provide supervision and training of personnel for work they feel should properly be available to them. PCO's see jobs or potential jobs being carried out as "demonstrations." They see circulars describing the availability of "free" or "at cost" bait and instructions in its use. Publicity is given to large sums of money with which a city proposes to hire large numbers of pest controllers. Rodent control is conducted as an active health department service described as "free."

At first glance, PCO's react to these reports or events as a bull is supposed to react to a red flag. Some of them have great difficulty in overcoming their first impression that government is competing with them.

When the truth is known, however, we seldom have basis for criticism. In fact, we frequently find that, agencies are uncovering new sources of business, or proving new techniques. Investigation shows what actually happened or is planned. Very often the facts are quite different from the Impression? left by newspapers or created by rumors.

So the real problem in this area is not so much what is being done but by people not understanding what is being done. Much friction and heat can be generated over these problems and a great deal of time is lost in discovering the facts and having them accepted by all concerned. Direct communication and sincere appreciation of the aspirations and responsibilities of each individual and organization are needed. NPCA, representing the pest control operators, will continue its effort to maintain open lines of communication to suppliers, and to research, regulatory and extension agencies. And we will encourage our affiliated local pest control associations and our individual members to do so.