

The Aquatic Weed Control Training Program Of The FCD

GORDON E. BAKER

Biologist

C. & S. Florida Flood Control District

P. O. Box "V"

West Palm Beach, Fla. 33402

ABSTRACT

The basic principles for training applicators for certification in the field of aquatic weed control are reviewed. The program of the FCD is described and future objectives emphasized.

INTRODUCTION

Charles F. Zeiger, Chief of the Aquatic Plant Control Section of the Corps of Engineers in Jacksonville, Florida, addressed the Hyacinth Control Society in 1965 concerning the training of personnel for the safe use of herbicides (1). Since that time there has been almost total silence about this subject. The reason, of course, is brought out in the opening paragraph: "Most managers are well aware of this responsibility, but unfortunately it is one that often is set aside in favor of more pressing problems." Therefore, it is appropriate at this time to review the basic principles of training and explain how the Central and Southern Florida Flood Control District (FCD) is preparing its personnel for applicator certification.

NEED FOR CERTIFICATION AND TRAINING

Several years ago, Zeb Grant described the implemen-

tation of an aquatic weed control program.¹ The program is composed of several steps or areas of consideration in order to accomplish the goal of adequate weed management. These steps are: (a) identification of plant species to be managed; (b) determination of the type of control to be used; e.g., mechanical, chemical, biological, etc.; (c) determination of frequency of treatment necessary; and (d) proper field operations, which includes use of equipment, handling of chemicals, personnel training, safety, etc. In this presentation, the training of personnel and field operations received the major emphasis — "to do otherwise and have unqualified people apply herbicides would be a foolhardy act on the part of the drainage district and would only lead to an expensive or unsuccessful operation, or one in which the property of others is damaged as a result of the improper application." This philosophy is also illustrated on the sample examination for preparation of applicator certification mailed by the Florida Department of Natural Resources (DNR).² The answer to the question of

¹Grant, Z. 1968. Implementation of Aquatic and Marginal Weed Control Program for Drainage and Flood Control Canals. Talk presented at American Society of Civil Engineers meeting. Phoenix, Arizona.

²Burkhalter, Alva. 1975. Certification of Aquatic Applicators Sample Examination

the most important item of an aquatic herbicide application system is, of course, the trained applicator.

The principles of personnel training outlined by Zeiger (1) include familiarization of the areas to be worked, keeping accurate records of the operation, knowledge of the herbicides used and their safe handling, knowledge of proper equipment and maintenance, and knowledge and use of appropriate publications.

PROCEDURE FOR TRAINING AND CERTIFICATE OF PERSONNEL

The FCD is composed of seven field stations in addition to the administrative offices. At each field station, the "chain-of-command" is the Superintendent, Assistant Superintendent, Spray Crew Foreman, Spray Crew Chief, and Sprayman. The policy for certification of personnel as set forth by the Director of the Department of Field Services is that the following will become certified applicators: the Department Biologist, who administers the chemical weed control program for the District; each Field Station Superintendent; the Assistant Superintendent; and Spray Crew Foreman. The Department Biologist is responsible for instructing these people in preparation for certification. The training program of the FCD is broken down into three basic areas: (a) 3-day lecture series sponsored by DNR, (b) periodic classes at each field station, and (c) in-field experience and demonstrations. To date, the DNR has held two of the 3-day lectures. Those personnel being trained for certification who did not attend the first series, attended the second series. This lecture series has had the same affect on the people that the "2-by-4" had on the mule in the classic story. That is, the first thing to do is get the mule's attention. The DNR lectures have done this and given the people a greater appreciation for the work they are doing. It has also given a degree of professionalism to the job of aquatic weed control.

Using those lectures as a base of knowledge and inspiration from which to work, the author has conducted periodic classes at each field station explaining in greater detail those subjects brought out in the DNR lectures. In addition, the personnel have been quizzed on plant identification; given basic principles of biology, chemistry, ecology; and have been instructed in calibration of equipment, safety, and

economical aspects of various plants. Two or three classes per year are given at each field station. These classes last from 0.5 to 2.0 days in length. Various reference materials are being used in the classes and have proven very useful. Included are the following:

1. Muzik, Thomas J. 1970. *Weed Biology and Control*. McGraw-Hill Book Co., New York, N.Y., 273 pp.
2. Gruelach, Victor A. 1968. *Botany Made Simple*. Doubleday & Co., Inc., Garden City, N.Y., 191 pp.
3. Florida Dept. of Natural Resources Staff. *Aquatic Weed Identification and Control Manual*. Bureau of Aquatic Plant Research and Control. Tallahassee, Fla., 100 pp.
4. Baker, Gordon. *F.C.D. Weed Control Manual*, West Palm Beach, Florida. 75 pp.
5. *Herbicide Handbook of the Weed Science Society of America*. 1970. W. F. Humphrey Press Inc., Geneva, N.Y., 368 pp.

So far, there has been some time spent on in-field experience and demonstrations perfecting application techniques of the applicators and demonstrating new chemicals and application systems. However, greater emphasis has been placed on the classes.

FUTURE OBJECTIVES

In the future months and years, the process of training will continue with more emphasis being placed on in-field instruction as well as the continuing classes on various aspects of weed control. Specific areas to be covered include equipment types and maintenance, herbicidal activities on various plants, and special problems in application and safety of herbicides in the aquatic environment. As new information becomes available, this will automatically be included in the training program. In this way, personnel will be kept up to date and remain the professionals which their activities demand of them, especially in this period of economic crises and shortages.

LITERATURE CITED

1. Zeiger, C. F., 1966. Training for the safe use of herbicides in aquatic plant control. *Hyacinth Contr. J.* 5:5.