



Stull Chemical Company's bifluid spray system is demonstrated by Marvin L. Kolberg of Stull. Kolberg is using the John Bean Roto-Mist unit for benefit of sprayersmen attending the Texas A & M sponsored Industrial Weed control Conference.

Texas Industrial Weed Conference Report

In-House Vs. Custom Contracts

IN TERMS of business volume, industrial weed control is big business. Not only is it a growing segment of the industry, it is probably the fastest growing nationwide.

Non-crop weed control has always been a major operation, but in time past it has largely been done one way or another by a company's own work crews.

Today, the picture is different. Companies in many cases find it pays to hire a custom contractor to assume responsibility for this area of company operations. Other companies still feel they can do the job with in-plant help and equipment.

The pluses and minuses of contracting weed control work or of using company help were discussed at length at the recent In-

dustrial Weed Control Conference at Texas A & M University, College Station, Texas.

Dr. C. V. Wootan of Texas Transportation Institute at the University listed the advantages and disadvantages of each system. "Whether you use the services of a contractor or your own forces for weed control," he said, "depends on conditions existing in your individual company."

In favor of a company using a contract applicator for weed control, Dr. Wootan listed three big advantages. These are: (1) Known cost, since a good contract operation will be done at a given price. It may not be more expensive, but it will be known, and Wootan believes this is a distinct advantage to a company; (2) No company resources are re-

quired. Neither company labor nor equipment is committed to the operation; and (3) Proper scheduling. A good contract operation permits work to be done at the proper time without affecting the company's regular operations. Since a contractor may be able to provide the service with less disruption to the company's own operation, the contract may prove lower in cost.

Disadvantages

There are also disadvantages to the system of using a contract operation. Dr. Wootan listed five as follows: (1) A contractor may not be quality conscious. This naturally depends on the contractor but is extremely important to the company; (2) Scheduling may be difficult for the



Dr. Wayne G. McCully, left, chairman of the Industrial Weed Control Conference, and with the Texas A & M Range Science Department, visits during field demonstration with George D. Bucher, John Bean regional sales manager at Denton, Tex., center, and Victor M. Jouffray, John Bean district sales manager at San Antonio, Tex.

contractor; (3) Contract costs may be high. Despite the fact that all costs must be paid and thus included in a contract, it may prove lower in cost than the company's own cost; (4) Company image may not be favorably reflected by the contractor. This is important since outsiders usually consider anyone working on company property to be a company employee; and (5) Contract performance is a factor. The possibility of non-performance is the risk which companies assume when they contract for work. Though legally binding, before the problem is resolved the season may be long past when the work can be done.

Dr. Wootan also listed the pros and cons of using in-house labor and equipment to handle the weed control operation. In favor of the in-plant system, he listed such factors as: (1) Use of company labor. This is feasible when underemployment of the company force coincides with the

weed control work season; (2) Close quality control. When company help is used, the firm has control over the quality of work performed; (3) Improved control over scheduling. A company can do the job exactly when needed, even though its own

Servis Flex rotary cutter is demonstrated by Al Scifres, Servis Equipment Company, Dallas, Tex., during field event.



regular company work schedule may be disrupted.

In-House Minuses

Disadvantages of using the in-plant system were also listed as follows by Wootan: (1) Capital is required. A company has to tie up capital which might better be used in the company's primary business activity; (2) Extra labor is required. Except for very small weed control operations, extra labor must be added to the work force. This may create the problem of unneeded labor during the off-season; (3) Supervision. An in-house labor force must be properly supervised to be effective and this requires more supervisory personnel or increased work load on that already available; (4) Extra plant cost. Warehouse and storage space is needed for machinery and chemicals; and (5) Extra overhead cost. Any activity which increases labor, equipment and supplies creates overhead. Such an operation must pay for its portion of purchasing, payroll, accounting, utility, and management costs.

In making the decision as to choice of in-plant or contractor,

(Continued on page 42)



Panel members who discussed weed control and turf management as practiced by utility and pipeline companies are, left to right: A. E. Sebastian, Southwestern Bell Telephone Co., Tyler, Tex.; N. A. Tate, Sun Pipe Line Co., Beaumont, Tex.; Dan W. Crofts, Texas Power and Light Co., Dallas, Tex.; and E. D. Robison, panel moderator, Texas A & M Research Station, Spur, Tex.

Industrial Weed Conference

(from page 10)

Wootan said that as an economist he would consider what he called "opportunity cost." In brief, Wootan said, this is one way of asking, "What could I have done with the resources devoted to this operation (those of in-house weed control operations) if they had been available for use in another part of the business?"

Dr. Wootan also stressed that the dollar cost for weed control is not the only criteria for deciding how the job will be handled or how well weed control needs to be done. He pointed out that a company weed control program is generally instituted, at least in part, as a public relations or image building activity of the firm. In short, beautification of company property and specifically weed control becomes part of an overall effort by the company to present a view of the company to those it seeks to influence whether they be the gen-

eral citizenry, customers, clients, or others.

Rights-of-way Programs

Vegetation control programs on pipeline and utility line rights-of-way were examined by representatives of each in panel discussions. E. D. Robison, brush control range scientist at the

Ground spray rig with Stull bifluid system and John Bean equipment was used for weed and brush control demonstration.



Spur, Tex., University research station and moderator said that public acceptance is important in the total program carried out by industry. This factor was also mentioned by each company speaker.

Speaking for electric utility programs was Dan W. Crofts of the Texas Power and Light Company, Dallas, Tex.

In serving almost one-half million customers, Crofts said Texas Power and Light maintains 26,000 miles of lines. These interconnect seven major generating stations with four other utility companies and involve more than 500 substations. In all, the company has to maintain some 60,000 acres of rights-of-way.

Budget for this operation ranges to more than \$750,000 yearly. About 20 percent of this total goes for clearing new rights-of-way. The balance of \$600,000 is spent as follows: 8% for reclearing and mowing rights-of-way by contract and 7% for the same type work by company crews; more than half, 57%, for tree trimming operations by contract and by company crews; chemical right-of-way control by contract applicators account for 3% of this expense and another 1% is expended by using company crews; 2% is spent for soil sterilization

by contract applicators and an equal amount for the same practice by company personnel.

Being a cost-conscious industry, Crofts said that the company will generally choose the most economical method consistent with good operating practices. But above all, he said, is assurance of good relations with the company's customers.

His company, like others in the field, has a keen interest in further development of growth retardant chemicals. These can increase the time between trimming operations or possibly retard growth to the extent that trimming may not be needed.

For controlling undergrowth Texas Power and Light uses a number of practices and combinations of these. Listed by Crofts were hand clearing, bulldozing of timber and brush, root plowing chemical spraying with tordon, 2,4-D, 2,4,5-T and ammate mixtures, pellets of tordon, dybar, and hyvar, selective weeding and brush control with DSMA and residual Karmex, and mowing or shredding.

Cost of using the company's own shredder and mowers with company labor runs \$13 to \$17 per acre. With 3- to 4-year mowing intervals, annual costs range from \$3.25 to \$5.50 per acre. Contract mowing, Crofts said, is somewhat higher. Fence rows and areas inaccessible by mowers are treated by personnel during regular patrols or mowing operations by scattering pelletized dybar, tordon, or hyvar.

Some contact spray and basal treatments have been used, Crofts reported. Initial cost has varied from \$20 to \$220 per acre depending on density. Retreatment intervals are not defined and annual costs are not as yet available. Stump treatment when used to supplement clearing operations accounts for 10% to 30% of the clearing cost.

Selective Herbicide Use

Proper use of selective chemi-

cal weed control promises to eliminate mowing in some residential areas. The company, Crofts stated, has been investigating the use of selective weed control to kill Johnson grass and other tall weeds and to allow the bermuda grass to remain.

Substation areas account for 450 acres of land which requires varying degrees of vegetation control. How these areas are treated depends on cost and the degree of esthetics desired. Some

company recommended rates of chemicals.

Nahum A. Tate, Sun Pipe Line Co., Beaumont, Tex., discussed a number of unique uses of chemicals in his industry. Asphalt berms or aprons are used around the bases of oil storage tanks. These aprons handle rain runoff and help maintain low soil moisture areas beneath tanks. Prior to spraying these with herbicides, aprons were recoated with asphalt every three to four



Multi-use ground spray rig using F. E. Myers & Bros. Co., equipment led off Industrial Weed Conference field event.

150 acres is sterilized each year. About half is handled by contract on an annual, guaranteed basis using Karmex and Telvar as the sterilant. The contractor determines the dosage rates and applies the sterilant based on his past experience. Regrowth is retarded at no cost to the company. The contractor assumes liability for runoff. Crofts said that this system has proved to be satisfactory to the company and contract costs are less than use of company labor and chemical

years because the sealing capacity had been destroyed by grass and weeds growing up through the asphalt. Herbicides are now applied heavily two to four weeks prior to recoating of berms. Though this practice has been used only six years, Tate said that results indicate that the cost will prove to be an excellent investment.

A very similar practice by Sun Pipe Company, Tate said, is to use herbicides along asphalt roadsides. A yearly application

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of preemergence herbicide in a one-foot strip along the road edge prevents breakup of the road by grass and weed growth. The company uses this practice along roads which do not have enough traffic to keep weed growth beat down.

Tate reported that his company has used soil sterilant type herbicides for many years under above-ground tank lines, along fence lines, in railroad ballast, and under manifolds and pipe racks. High cost of labor coupled with competitive prices for chemicals has made hand cutting of any weed areas obsolete, he said.

Cross-country pipelines are visually checked by aerial inspections twice each week. This is a safety practice to detect leaks before they can become a major problem. Thus, visibility is necessary and vegetation insofar as practical must be controlled. All pipeline rights-of-way are mowed once yearly and those

with high capacities twice yearly. Mowing is done on a contract basis. Tree trimming is also a major practice and the company has been experimenting with chemical methods. Both hormone and contact herbicides are being tested and though much remains to be done in this area, Tate feels that spraying offers possibilities.

A third panel member, A. E. Sebastian, Southwestern Bell Telephone Company, said he could second the experiences of both Crofts and Tate. Most important, Sebastian said, is the quality of application from a cost standpoint. Many of the poor experiences in chemical weed control, he said, have stemmed from a lack of know-how and neglect in application. Public relations both with the general public and with customers is important he stated. Thus, he believes it most important that contractors understand this area of public relations when treating company

property. Southwestern Bell, Sebastian said, uses contractors almost exclusively in its vegetation control program.

About 150 equipment and chemical suppliers and pesticide applicators attended this Texas A & M sponsored Conference, Oct. 20-22. This was the third annual event of this type staged on the University campus.

Membership Directory Additions:

WTT inadvertently failed to include two members in its October listing of members of the American Society of Consulting Arborists. Consultants to be added and who will be included in future directories are:

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