Important Steps To Prescription Brush Control

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ONE OF THE GREAT challenges for this demanding new decade is to use herbicides for environmental beautification, reduction of pollution, and to aid in conserving our natural resources. Environmentalism is here to stay as a basic fact of life, and will have tremendous impact in the 1970s, having supplanted natural beauty of the 60s.

Changing right-of-way problems include public concern over environment, conservation and aesthetic values. Utility top management is concerned with rising costs, interest rates and taxes. Legislation at the local, state and federal level also is becoming a serious problem. Finally, everyone has a problem with the available manpower supply. The prescription approach is imperative in meeting these challenges, and within this framework, seven important steps are vital to success of our industry, whether we be arborists, nurserymen, educators, researchers or salesmen.

1. Take the Natural Approach

Because of the many challenges to industry and management, i.e. high taxes, interest rates, legislation, etc., we should take nature's approach in developing a right-of-way management plan. We shouldn't be struggling against the environment, but should be partners in a joint venture using the natural approach in right-of-way management, utilizing botanical controls and minimizing use of chemicals. A stable plant community is a utility manager's most profitable friend.

In original clearing of right-of-way for electric utility, pipeline, or highway, the selective cutting or tailored right-of-way using a prescription approach and minimum clearing, can achieve the desired results at minimum cost. Leasing some desired vegetation is particularly important at road-crossings and other sensitive areas.

2. Extended Season Work

In programming brush control for maximum results at lowest ultimate cost, manpower and machinery should be scheduled for continuity of work year-round, whenever possible. Today, trained men need adequate pay rates and security of employment, otherwise they look elsewhere for work.

Equipment cost factors such as depreciation, return on investment, operating costs and insurance must be kept low by long-season work. $2,000 annual depreciation amounts to $10 per hour for a short season, but is only $2 per hour for a six-month season.

So, instead of six crews being employed for the conventional three-month foliage season, two crews can be utilized for nine months in most parts of the country. Having two crews on the job instead of six crews means lower equipment costs, and lower costs of hiring, training and supervising manpower. Result: a far better job for the customer at less cost.

3. Ultimate Low Cost

In recognizing the value of real brush elimination versus mere brush control, long-range management planning is required. Whether horses or helicopters, back tanks or bombardiers, the best equipment for the job should be considered, not an hourly rate cost of 75 cents or 75 dollars per hour. Also, in selecting the right chemical for the job, the formulation which will yield the best results for the client's dollar should be recommended. This may mean a chemical costing $10 per gallon, rather than another costing $5 per gallon. Here again, cost-per-gallon should not be the criterion, but dollars-per-acre to achieve best results.

4. Good Application

In the final analysis, the doctor's diagnosis and the druggist's prescription is of little value unless the patient follows directions. So also, the best research and formulating know-how are lost if herbicides are not properly mixed and applied.
If you can't see the diagonal access road to this utility high line, then one of Asplundh's principles of right-of-way maintenance has been achieved. Selective chemical treatment can encourage low-growing plants beneath lines while preventing growth of trees that would attain obstructive heights. A vegetation "wall" is thus achieved, as is shown below.

The spray crew must follow directions and be sure of proper application to avoid disappointment or worse—having to come back and do the work over free-of-charge. And remember, you can achieve complete brown-out with only 100 gallons per acre of mixed foliage spray, when a real root-kill may require 300 gallons per acre.

5. New Methods

New chemicals and new methods (or improvements on old methods) have aided the development of chemical brush control in recent years. Our modification of existing mist-blowers to reduce spray drift and put chemical sprays on target, have increased root kill substantially.

In addition to stem-foliage applications with thickeners, we have modified mist-blowers for basal and dormant-stem applications. The air-blast is particularly helpful in blowing away leaf litter and other debris so that chemical mixtures can be targeted. Tordon formulas, additives to 2,4-D and 2,4,5-T, and the Unimog have all added.

6. Multiple-Use Prescription

Programming pays off; nowhere in this country does a problem exist

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in right-of-way vegetation maintenance that cannot be solved with today's changing technology. For example, traditional stump sprays have been replaced by pre-cut basal or delayed spray applications for improved efficiency.

In remote areas, overhanging branches on pipelines or transmission lines can be safely side-trimmed by carefully-controlled, drift-free applications.

Old problems such as ash, scrub-oak or root-sprouting species can be readily eliminated by prescription programming. Special problems of fence rows, tower bases, or sensitive areas near ornamentals or hazardous crops can be treated safely today.

The concept of multiple-use has been used by foresters for decades to provide additional land and vegetation resources. For example, rights-of-way can be used for nurseries, pasture and other forms of agriculture as well as recreation, watersheds, wildlife and other uses. The 17-year experiment conducted at Pennsylvania State University has demonstrated that properly managed right-of-way with brush controlled by selective herbicides supports more wildlife food and cover than the surrounding forest land. This demonstration has been given only two chemical treatments in 17 years!


Too long the problem of roadside or distribution brush has been minimized or overlooked. In the United States, electric utilities spend ten times as much money for distribution vegetation control as they do for transmission vegetation control. True, existing techniques and application methods must be modified and carefully supervised. However, results from carefully prescribed programs over the past 15 years have shown tremendous economies as well as improved roadside vegetation conditions. Selective vegetation removal and selective sprays can aid reliability of electric and telephone service while improving roadside aesthetics, and save money for utilities in the bargain.

These seven fundamental steps are vital in promoting herbicides as gen-

In addition to helicopter spraying from the air, Asplundh uses vehicular equipment from the road and off the road...
A new method of growing trees in containers may produce hardier, faster-growing specimens at lower cost, according to a Michigan State University forestry expert.

Dr. Donald P. White, professor in MSU's Department of Forestry, is heading up a research program to provide a more effective method of planting valuable "blue ribbon hardwoods" such as black walnut, black cherry, tulip poplar, birch and oak.

"We're using a variety of special container systems to grow these valuable trees from seed to tree planting size in a few weeks," says Dr. White.

"Planting container-grown trees achieves several important objectives, including exceptional survival, a prolonged planting season, and accelerated growth during the first season. It also eliminates the need and cost of nursery production and transplanting."

Good quality trees of these "blue ribbon" species are in short supply and bring premium prices, notes Dr. White.