

# A COMPLEX : 10 MILLION ENVIRONMENT : ACRES OF TURF

*A look into*

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*“... you must  
offer expertise  
and service.”*

**T**HE United States Department of Agriculture reports that there are 10-million acres of turf in this country. This figure **doesn't** include home lawns. These 10-million acres are industrial turf, apartments and condominiums, hotels and motels, all types of government installations (from office buildings to military posts), Federal and state highway rights-of-way, parks and recreational areas, sod farms, athletic fields, schools and colleges, hospitals, airports, cemeteries, and railroad accesses.

In short, there's a lot of ground surrounding a wide variety of facilities. Some of this turf gets a lot of care, while other turf simply is mowed. Many property owners have their own crews to apply herbicides and do landscaping work. Other owners turn to custom application firms to get the job done. So, there are not only a variety of different types of turf sites; there also is turf where you may not tread.

In general, the custom herbicide application market is in the densely populated areas of the United States, regardless of what part of the country. This excludes, in many cases, the inner city of urban centers. The amount of expendable income—ei-

ther by the homeowner, businessman, or government—is a major factor in turf care. Income levels often are reflected in the quality of turf.

Now, let's look at the major categories (or market segments) for custom herbicide application. The first category includes golf courses, sod farms, and athletic fields. Many courses have staffs that apply herbicides, mow, and do other chores. However, upcoming state and Federal pesticide applicator certification programs (some states already certify applicators) may make it possible for knowledgeable applicators to take over some golf course work. Athletic fields may be small, but certain schools expect them well cared for. The lifeblood of sod farms obviously is not weeds. The need for exact chemical application is important here, too. Some sod growers have chemicals applied by air; so there is a need for highly specialized equipment here.

Home lawns are a new area for the custom applicator. New application firms are springing up quickly around the country. These firms are making four or five applications (fertilizer, herbicide, insecticide, and fungicide) annually, so spring is not necessarily the only peak season for

the home market. Also in this second category are apartment complexes, condominiums, and industrial firms that are proud of their outward appearance. The latter three also may desire full landscaping services (mowing, pruning, etc.) in addition to herbicide application. Because the acreage is not large for any potential customer in this category, you need a number of customers to maintain a profitable business.

In group three are industries that want a nice—but not great—turf. They've some money to spend, but not a lot.

Opportunity in group four is, perhaps, the most limited. This group includes airports and highway rights-of-way. Airports generally want only to keep weeds away from runway lights and off the edges of runways. Total-kill products are most often used here. Herbicide application on highway rights-of-way is usually done by the government. However, a private applicator pops up every so often. Profits are lowest here, and it's probably the most difficult segment of the market to penetrate.

Not related to the above is total vegetation control (TVC). Railroad

## the green green world of commercial turfgrass and sod



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sites, certain industries, utilities, and highways need this service. However, make certain you want to invest in the special equipment required for this type of custom application.

To be sure, there is a good market for custom herbicide application. However, you must concentrate on the treatable acres. Don't let the 10-million-acre figure mislead you. Probably significantly less than half of this land is ever treated for weed control.

As with most businesses, there are good firms and there are less competent ones. You've probably heard of some outfits that spray with nothing but soapsuds at a charge of \$25 or use the wrong chemical for the job. Whether you intend to seek new customers for the custom application business or replace firms now treating turf, you must offer **expertise** and **service**. This knowledge sets you apart from applicators who do not know their business.

Expertise should be a vital part of your operation. You need to know the best time to apply chemicals, weed identification, proper rates for the herbicides you use, and the type of equipment best suited for each job. Knowledge and compliance with

Federal and state laws and requirements fit into your expertise.

And, liability coverage is as important for you as it is for any businessman. Herbicides may drift to nearby ornamentals and other desirable plants even under ideal situations. Poor attention to proper rates also can destroy turf and surrounding vegetation. Experts value their reputation and their customer. They have liability coverage.

Doing things the right way must have an advantage. A recent survey by this magazine revealed that 10 percent of the applicators do 60 percent of the dollar volume. Expertise is the key. Your customers want and need to depend on your knowledge.

Your expertise is reflected in the herbicides you use. Are they liquid or granular, or both? Experience has shown that profit potential is about the same for either formulation. This decision and that of market segment are governed by the type of weed control you offer. The types are preemergence, postemergence, selective, or TVC.

This is a good time to mention that a close working relationship with chemical firm representatives and people from chemical dealers is most beneficial. Their knowledge of

the market in your area and of their chemical products can help you in making your choice of granular and liquid products and, eventually, equipment to apply them.

Proper equipment is essential. Spray rigs used for home lawns are of little value for golf courses because the acreage is too great. Hand-gun sprayers are far less accurate than boom sprayers. Booms offer more uniform chemical concentration and reduce the chance of overlapping where two, three, four, and even five-times the normal application accidentally may be made.

If you're treating industrial turf, you probably will need a tank sprayer ranging from a 100- to 500-gallon capacity or a large crop or rotary spreader. Because of the rough terrain around many utility sites, a four-wheel-drive vehicle is best. You also may be applying other chemicals, such as fungicides and insecticides. It is necessary, then, to purchase equipment suitable for applying different types of chemicals.

Your customers' acreages can guide your equipment decisions. Many applicators design their own rigs or modify commercial equipment  
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ment to meet specific needs.

Selling the concept of weed control may not be an easy thing to do. Aesthetics is still the major reason for controlling grassy and broad-leaf weeds in most fine turf. They just don't look pretty. Economics also enters the picture.

Desirable grasses revert to a relatively dormant state during the hot summer months. Weeds don't. They flourish. The result is that weeds are about all that is mowed in non-irrigated turf during the hot months. One or two effective herbicide applications should save your customer money by eliminating additional mowing costs created by weeds.

Economics of another sort enters the golf course market. People generally prefer to play their game on a well-kept course. Weeds could send players to other courses, reducing revenues for the weedy course.

Tall weeds that dry out in late summer present a fire hazard and also do a good job of serving as hiding places for rats and other undesirable varmints. Weeds also produce pollens—a cause of allergies. Weedy vacant lots in cities create eyesores. So, as you can see, there are a number of good reasons for controlling weeds.

Another factor to consider is the application of herbicides in the fall. Traditionally, about 80 percent of the work usually has been done in the spring. This concentrates your activities into a relatively short period. This time span can be further reduced (and often is) by rain, which can make it impossible for application equipment to get onto the turf. This, in turn, can stretch your capabilities and prevent you from taking on new customers.

Today, however, there is a trend away from application solely in the spring. Many universities are recommending fall application of herbicides to control and prevent broad-leaf and grassy weeds from appearing next spring. This not only gives your business more flexibility but also gives you the opportunity to apply chemicals during the fall when weather conditions are usually more favorable. Chemical drift is less of a problem in the fall because most vegetables, flowers, and other annual plants have completed their growing cycles.

The fall also is the best time to seek new business. It's usually the time when those responsible for turf care are planning their budgets for the following year. Once a potential

customer has committed money for the year, you probably will not be able to get any of his business. By contacting him early you have a good opportunity to work your program into his future plans.

## AQUATIC WEEDS

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For example, if you intended to work exclusively in the golf-course segment of the industry, you might not need a boat at all—or a small skiff would easily suffice. At the other extreme, if your entire market were irrigation and flood canals, an air-powered hydroplane skimmer with booms or sunken drag hoses will probably be necessary.

Interestingly, it generally doesn't take a lot to pay off the initial investment and begin to recognize valid profits. Using the outfit above, lets take a typical example.

Generally, lakes are not treated across the entire surface. This is because aquatic weeds in deeper segments of the lake are not bothersome and/or simply do not get sufficient sunlight to grow. On a small 10 acre job along the shoreline of a lake, treatment would usually average out to about four feet deep. Thus, an applicator would be treating 40 acre feet.

The chemical to be used would vary depending on the treatment necessary and the type of aquatic weed to be controlled. In Michigan, for example, Aquathol Plus will usually do the job at 3 ppm (parts per million). Three ppm is equal to 66- $\frac{2}{3}$  gallons for the job. To make it easier to figure and provide a bit of a safety factor, lets use 70 gallons.

The chemical cost to the professional applicator for Aquathol Plus was \$10.90 in 1973—or 763.00 for 70 gallons. Many applicators, on a job of this size, just double the chemical cost and charge the customer that amount. Others sell the chemical at the retail price and add on an application charge. The application fee may vary depending on the size, distance traveled, location and difficulty of the job.

For this job, let's use the second method. Seventy gallons at a retail price of \$13.00/gallon equals \$910.00. If an application fee of \$10.00 per acre foot is used (total = \$400), then the total bill to the customer equals \$1,310.00. The applicator has a dollar profit of \$547.00. As you can see, it does not take too much time to write-off an initial investment. The

professional's key is balancing his investment to the potential market in his area; or to the market he seeks to penetrate.

Just exactly what is the job? Well, the first element is to identify the market or markets. Beyond that, there are essentially six steps.

1. Meet with your customer and discuss their particular needs. Does he want to fish, swim, boat or waterski—or is his an industrial requirement such as irrigation or flood control; or purely aesthetic. Different chemicals do different jobs.

2. Survey the area to be treated to obtain information concerning the aquatic vegetation, water quality and storage capacity. Identification of the specific water weeds and/or algae is paramount to successful control—and there are well over 25 different varieties (generally easily identifiable from state manuals or chemical supplier technical information sheets).

3. Select the proper materials to do the most effective job, consistent with state and federal environmental protection laws. I reemphasize the state laws because they vary widely from state to state even in similar geographical regions.

4. Offer your customer your contract and clearly outline what he will receive, and what payment schedule will be made. Some applicators provide "easy payment" schedules of 50% down and the remainder in 30 days—or in two payments of 30 and 60 days. Most year-round management contracts guarantee a specific performance or control ratio.

5. Apply the herbicide. Obviously, the length of time required to apply the herbicide varies widely with the type of application and the type of equipment. With boat or mechanical spreaders the average is probably between 5 and 10 acres per hour.

6. Inspect the treated area periodically to determine if adequate weed control has been achieved.

For the professional applicator, penetrating the aquatic weeds market may prove a very satisfactory and financially rewarding opportunity . . . or it may not be "your cup of tea."

At Pennwalt Corporation we have a large number of technical sales representatives that specialize in the aquatic weed control market. These people are experienced and helpful and willing to assist in the investigation of aquatic markets and business development. □