

Chemical turf market evolves from ag to golf

Golf course superintendents use products that had their origins in agricultural or industrial markets.

By DON MASKE,
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When I first started working on golf courses as a high school student in the late 1950s, many of the chemical products used on golf course turf were the same products used in the agricultural and industrial markets. Companies were selling mostly mercury and lead-based products like Calo-Clor and lead arsenic, and the most widely used insecticide was chlordane.

At that time, agricultural chemical company representatives spent some limited time in what was called the "golf course market". There was no lawn care market segment. Most of the golf course superintendents were not college trained, though some where. In the late 1950s and early 1960s, turf programs were established at the various universities—Penn State, Michigan State and the University of Massachusetts to name a few.

I received my turf degree from Penn State in 1965, worked as an assistant at the Philadelphia Country Club, and then went into the service.

From links to sales

Upon discharge, I became golf course superintendent at Cold Spring Country Club on

Long Island and then was hired in 1969 as a Midwest sales representative for TUCO, Division of the Upjohn Company. They produced one of the first products marketed specifically for turf usage—Acti-dione, an antibiotic fungicide (now off the market).

TUCO also was one of the first companies to have sales reps who made end-user calls in the golf course market.

But the golf course business wouldn't support a separate sales force, so I also sold products for the tobacco and fruit and vegetable markets, covering several states from my Chicago base. DuPont, with Bob Miller, and Mallinckrodt, with Stan Fredericksen, were two major chemical firms active in the golf course market at that time.

Eventually, the turf markets grew and major manufacturers formed their own turf product groups, to concentrate on the golf course market, lawn care industry and roadside vegetation management.

2,4-D was all we had

In the early years, weed control was limited to 2,4-D or dicamba for dandelions on golf course fairways. Superintendents used little or no preemergence crabgrass material. I can remember digging out crabgrass plants by hand from fairways at Olympia Fields in Chicago, where I worked during college.

In 1964, there was a huge Pythium outbreak in the Chicago area.

The only thing to use at that time was hydrated lime in an attempt to dry out the surface moisture. Because so many superintendent jobs were at stake, the Chicago District Golf Association held an

educational meeting to make club members aware of the seriousness of the problem. We didn't have Banol fungicide or any of the other modern products that now control Pythium.

Acti-dione for spots

One of the first affordable disease programs on fairways



Maske:
golf course aesthetics today far ahead of early '60s.

was the Acti-dione program that came out in the late 1960s. Back then, dollar spot and leaf spot were considered the most damaging disease problems, and Acti-dione controlled both. But brown patch could not be controlled economically and there was nothing that could be used for Pythium. The early products were mostly contact materials that would last only seven days. Now, we're using long-lasting materials, so we make fewer applications and the amount of total product used is much less.

Back when I first got into the business, most of the formulations were wettable powders and emulsifiable concentrates. Products came in paper bags or steel drums. Now formulations and packaging tend to be more user-friendly, in the form of dry flowables or water-dispersible granulars. Companies sell products in water-soluble packages or closed systems, limiting worker exposure. Use rates of newer products are much lower than they were in the 1960s and 1970s. For instance, for vegetation management we see herbicides used in tank mixes at rates as low as half an ounce per acre.

Lightweight equipment

One of the biggest changes I've seen in the golf course industry has been the shift from heavy, tractor-driven or pulled mowing equipment to the use of lightweight mowing equipment on fairways. Weakened turf often resulted from mechanical damage caused by this heavy equipment, allowing invasion from the ever-opportunistic *Poa annua*. In the last decade or so there has been a tremendous shift from predominantly *Poa annua* or *Poa/bentgrass* fairways to mostly bentgrass fairways on northern courses. I feel this is due largely to improved management programs which include lightweight equipment, clipping collection, better irrigation practices, and broader-spectrum chemical spray programs.

Pick up the clippings

In my early days if someone had told me they were going to collect clippings on 30-40 acres of fairways, I would have thought that ridiculous. But now superintendents do this routinely. This accomplishes several things: removes some *Poa* seed, reduces heat buildup from clippings, which tends to stress turf, and eliminates a possible source of disease buildup. In addition, superintendents have reduced nitrogen usage, so that clipping production is minimized, and the grass is not as succulent.

Golf course appearance was much different then. Watch the *Golf Channel's* highlights of past tournaments and notice the mowing patterns, grooming and other conditions. With the popularity of Arnold Palmer, the public began watching golf on television, and the country club members began demanding better conditions.

Courses look better

Recently I saw footage from the 1964 U.S. Open at the Congressional Country Club in Bethesda, MD. The course was groomed much differently from when the Open was played there again this year. New equipment and methods allow shorter mowing heights, contouring and striping. Aesthetically, there's no comparison.

Mergers, acquisitions and consolidations have reduced the number of players in the turf product marketplace. Since I began working for TUCO, the company has merged and reorganized several times—changing into NOR-AM Chemical Company and now to AgrEvo Environmental Health. Today the registration process is more difficult, and it's more costly to bring a product to market. More money is required to defend registrations, diverting funds from new product research.

—Don Maske began with the TUCO division of The Upjohn Company in 1969. He now covers the Midwest for AgrEvo Environmental Health, Wilmington, DE.

1962:

"Weeds & Turf" debuts as the first magazine to cover the professional turf care industry. ALCA forms to serve the professional landscape contractor. Dan Dorfman's Lawn-A-Mat lawn care company on Long Island is one year old and starts offering franchises.

Millard C.

Dailey's

Liqui-Green

lawn care

program gains

increasing

homeowner

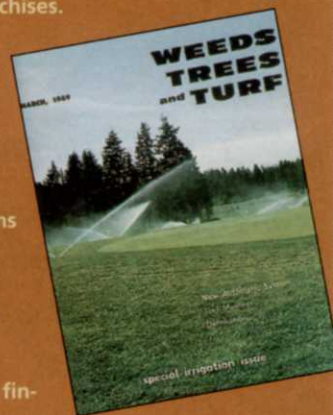
acceptance.

James Beard fin-

ishes first year of

15-year teaching stint at Michigan

State University.



1964:

John Deere's 110 model tractor

introduced nationwide after successful pilot project to dealers east of the Mississippi.

