

**20th  
ANNIVERSARY**



**Robert Moore** has been president of Aquatrols since 1958. His daughter **Demie** is responsible for sales and marketing.

# **AQUATROLS CORPORATION OF AMERICA BUILDING ON A RECORD OF SUCCESS**

For the past 25 years, Robert Moore, the developer of Aqua-GRO non-ionic wetting agent, has manned his Aqua-GRO exhibit at countless turf and horticultural industry trade shows. And he's preached the benefits of wetting agents before more industry meetings than he cares to remember. It has taken a while, but his efforts, on behalf of Aquatrols Corporation of America, are finally paying off.

Moore has been president of Aquatrols, a Pennsauken, New Jersey-based company that manufactures and markets Aqua-GRO, since 1958. Over the years, Moore and a handful of other wetting agent supporters have succeeded in influencing a large number of turf and horticultural professionals

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to accept horticultural agents as a viable water management tool and taught them how to use wetting agents effectively. In the process, Moore himself has become a familiar and respected figure in those industries.

### **New venture launched**

The idea for Aqua-GRO was actually conceived by Lawrence Fletcher in the summer of 1953. Fletcher, a Havertown, Pennsylvania, homeowner, was determined to find a way to rid his backyard of a persistent puddle without having to resort to tearing up his yard to install a costly drainage system. He knew a little about surfactants and their effect on water and convinced Anthony Gallaccio, a neighbor and a freelance laboratory technician, to test several surfactants on Havertown's loam soil.

Enter Bob Moore, an acquaintance of Fletcher and a former Mobil researcher. Interested in Fletcher's idea, early in 1954 he tested various cationic, anionic and non-ionic surfactants on soil samples he had obtained from California, Pennsylvania and New Jersey. Moore discovered that while they facilitated water drainage, the cationic and anionic surfactants adversely affected soil stability and were phytotoxic. Moore then turned his attention to several non-ionic surfactants which didn't exhibit the same negative characteristics that the cationic and anionic surfactants did.

He noted that the non-ionic surfactants he tested performed differently on various soil types.

Acting on scientific intuition sharpened by ten years at Mobil, Moore blended together the best performer on each soil type and repeated his tests. He found that the surfactant blend worked as well or better on all of the soil types than any of the individual surfactants he had yet tested. Backyard field tests conducted on zinnias showed that the plants treated with Moore's surfactant withstood drought conditions better than those that were not treated.

By the summer of 1954, the liquid non-ionic wetting agent was perfected, and the team named it

Aqua-GRO. Fletcher and Moore, certain that they had developed a product that would make home drainage problems a thing of the past, formed Aquatrols Corporation of America to manufacture and market Aqua-GRO.

It wasn't long before both men realized that the decision to market Aqua-GRO to the homeowner was an ill-fated one. The average homeowner simply wasn't knowledgeable enough to appreciate how Aqua-GRO could benefit him, and the product floundered on the market for nearly two years.

Having failed to make any progress in the consumer market, Aquatrols turned to the greenhouse, nursery and golf course markets. Fletcher and Moore reasoned that the professionals in the plant and turf industries would understand the value of Aqua-GRO and readily accept it.

Aquatrols' big break came in the fall of 1956. T. L. Gustin, then President of Philadelphia Toro, took some Aqua-GRO with him to the Breakers Hotel in Boca Raton, Florida. The hotel's golf course superintendent applied some Aqua-GRO to his course. The very next day, he noted a difference on his greens—there was hardly a trace of the normal early morning dew. The Aqua-GRO treated greens allowed normal play earlier in the day than untreated greens.

Gustin sold a substantial quantity of Aqua-GRO in Florida that winter, and when he returned to Philadelphia, he gave Moore a list of turf industry people who were interested in handling Aqua-GRO, the rudiments of a national distribution network were established.

### **Wetting Agents Come of Age ... Slowly**

By 1958, just as Aqua-GRO began to gain a foothold in the market, and despite the 28 patents that Aquatrols held worldwide, several other companies started marketing wetting agents of their own. Some of these products were effective and some weren't. Disappointed by some products' inability to match their company's claims, many people condemned wetting agents as useless.

Sales of Aqua-GRO up to that time were modest at best, and Fletcher opted to leave the company. Moore, positive that Aqua-GRO had vast potential, continued with Aquatrols.

According to Moore, had he known at the time that nearly twenty years of hard work and personal sacrifice lay ahead before he could claim any degree of success, he too might have thrown in the towel.

Moore and other marketers of wetting agents faced the same huge obstacle: The use of wetting agents for water management in turf and horticultural situations was a new concept in the late 1950's and little basic research by objective and respected industry authorities had yet been published.

### **Catch 22**

"Industry acceptance of wetting agents was slow because we didn't have any basic research to back our claim," Moore explains. "We had a hard time getting people to understand that Aqua-GRO improved soil drainage, not by changing the characteristics of the soil, but by changing the behavior of water."

"Basically, we were in a Catch-22 situation. Aquatrols didn't have the money to sponsor basic research, and without research and researcher recommendations to back our claims, not many people were interested in trying Aqua-GRO. We knew that Aqua-GRO worked and that it would sell if we could only get people to try it."

The situation improved some in the 1960's as researchers in Florida and California conducted some applied research involving the use of wetting agents and reported good results.

Undaunted by the lack of research support, Aquatrols introduced a granular Aqua-GRO formulation in 1968. Using vermiculite as a carrier, granular Aqua-GRO was well-suited for incorporation in notoriously hard-to-wet soilless potting mixtures, which were gaining popularity in the greenhouse industry at the time.

Support of Aqua-GRO for greenhouse use was provided by Cornell

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## Read what users say about Exhalt 800:



Everett Wood is the superintendent of Big Canoe Golf Club in Big Canoe, Georgia. Al Lanco of PBI/GORDON got him started on Exhalt 800 and now he swears by it. Here are his exact words. "Through the use of Exhalt 800 we are able to spray our greens with pesticide one hour and turn the water on in the next hour with no fear of our pesticide being washed off. This gives us the protection we seek during the heat and stress of the Southeast."



G. Wayne Zoppo is the superintendent at the Agawam Hunt Club in East Providence, R.I. In visiting with Jack Doyle of PBI/GORDON about his experience with Exhalt 800, he said that he has tested it very thoroughly and recommends it to his peers. He says: "Why take chances with expensive fungicides? Use Exhalt 800 with your fungicides for that extra protection. It works, and it is inexpensive."

## Only Exhalt 800 Does it all:

- Exhalt 800 holds pesticides in place for longer life.
- Dries in an hour or less.
- Won't wash-off or blow-off.
- Flexes as turf and foliage grow.
- Extends effective control period.
- Saves material and labor expense.
- Economical: use one pint to 100 gallons of spray.
- If frozen, does not separate; can be thawed and used.
- Does not damage turf, trees and ornamentals when used as directed.

**GORDON'S**  
PROFESSIONAL TURF PRODUCTS

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plant scientists James Boodley and Raymond Sheldrake, developers of soilless potting formulas. Aqua-GRO was one of the wetting agents that they recommended, among the hundreds of wetting agents they had tested, as an ingredient in their soilless potting mixes.

Despite the scarcity of research recommendations, Aquatrols' sales of Aqua-GRO improved slowly but steadily into the early 1970's. Then in 1973, the first turfgrass textbook mentioning wetting agents was published by Dr. James Beard, professor of turf sciences at Michigan State University. Although his book made no positive recommendation of wetting agents, it did recognize them as a turf management tool with useful applications.

Indeed, most of the published research data directly concerned with the use of wetting agents in turf situations has been gathered since 1973—nearly 20 years after the initial formulation of Aqua-GRO.

"Without a doubt, the research conducted by such respected turf authorities as James Beard, Paul Rieke, James Wilkinson and John Madison has provided the basis for the relatively recent general acceptance of wetting agents by the turf industry," Moore contends.

### Aquatrols into the 1980's

Responding to the needs of Aqua-GRO users and market opportunities, the company continued to refine its product. Aquatrols added a defoamant to Aqua-GRO in 1976, and introduced a spreadable formulation in 1977.

As Aquatrols' fortunes improved in the mid-1970's, Bob Moore was able to beef up his staff. In 1975, Ed Oberright joined Aquatrols as director of research, and Niki Holroyd came to Aquatrols as office manager. Oberright, who had been manager-in-charge of developing aviation oils and special products, brought 38 years of chemical research experience to Aquatrols. He had been responsible for improving and maintaining the quality of Aqua-GRO.

In the fall of 1977, Bob Moore's daughter, Demie, began working for Aquatrols on a part-time basis.

She assumed full-time responsibilities for product sales and marketing early in 1978.

With a goal of further increasing domestic availability and distribution of Aqua-GRO, Aquatrols, in 1980, signed an agreement with Mallinckrodt, Inc. to private label and co-market Aqua-GRO with Mallinckrodt. In 1981, Mallinckrodt introduced Aqua-GRO on the familiar Mallinckrodt green flag. Not content with merely marketing Aqua-GRO in North America, Aquatrols has recently established distribution agreements with companies in Hong Kong, Australia, South Africa and Japan and is presently negotiating agreements with distributors in Mexico, South America and the United Kingdom.

### Tip of the iceberg

Demie Moore is optimistic about the future of wetting agents and sees a time when wetting agents will become a standard water management tool in the Green Industry. She draws a parallel between the difficulties encountered by the chemical fertilizer industry in gaining widespread market acceptance and those facing the wetting agent industry.

"It took about 20 years for chemical fertilizers to make substantial progress in the agricultural markets and 35 years before they became generally accepted—wetting agents appear to be following a similar pattern."

Bob Moore agrees with Demie and takes her prediction one step further. "Wetting agents complement all the more efficient management practices being adopted by all sectors of agriculture. Not only do wetting agents make more efficient use of water—a resource that will become scarcer in the future—they are useful in helping to reduce the incidence of water-related plant disease and the volume of pesticides and fertilizers needed to grow plants."

In fact, Bob is convinced that the existing wetting agent market is only the tip of the iceberg, and that in time Aquatrols will discover other useful applications for wetting agents. After 25 years in the industry, Aquatrols has only just begun.

**WTT**