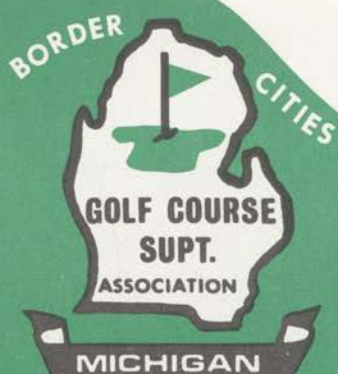


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# Thoughts From One Superintendent's Wife - To Another -

by CAROLINE C. TWOMBLY\*

I have been talking about executive's wives for 35 years. Now that I am to put these thoughts on paper, I am not at all sure it is a good idea, but I am sure that every executive's wife reading this will be certain it does not apply to her.

I have worked in electricity and electronics for 30 years while my husband worked in another profession. Through the years I met many executive's wives from all areas of the business world. I met far too few who really understood or wanted to understand what their husband's job was, what abilities he had to have to stay in that position, what it required of him or how it affected him mentally or physically. The greatest percentage of women were mainly interested in the social level his salary permitted. What he did interested them only to the point of how many days off he could take and when he would have his next vacation.

I've been married to the same man for 49 years. Thirty-eight of those years he has been a golf course

superintendent. This is why I am interested in the wives of golf course superintendents. There are some who think that, because their husband is a golf course superintendent, they are not an executive's wife? They are very wrong!

Webster's dictionary defines "executive" as any person or body charged with administrative or executive work. Your husband and mine are executives, but the caliber of the executive is up to you and him. Club members, other superintendents, officials from other areas of the golf world, club managers, golf professionals, salesmen and even his own workers look at the things he does and listen to what he says and judge the type of executive he is. If he is assured and self-confident, dedicated to his club and the personnel, they then know he has an understanding wife. His willingness to stay for an unexpected meeting or to deal with a sudden problem; his always-on-time record; his ability to return to the club in the evening or on a day off to straighten out some major problem; all of these show your love and concern

\*Caroline Twombly is the wife of Ardyce Twombly, Superintendent of Bel Air Country Club in Los Angeles.

Continued on Next Page

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for him, your understanding, your ability to adjust your life to the demands of his job.

If he is anything but assured and and self-confident, chances are his wife is not understanding and he is torn between two loves. He is never sure how his wife is going to accept the demands of his position, neither is he sure how the club is going to accept the demands his wife makes on him. He tries to balance the two but rarely succeeds.

It is to this group of wives I address myself. Fortunately, they are in the minority.

When he shows an unwillingness to stay for any unexpected problem or meeting, or if he does stay, has anxiety to leave as soon as possible, he demonstrates a lack of understanding at home. His tendency to call on one of his men to take care of a problem that you lack concern for what happens to the club, its property or its equipment. Acres of very valuable land and thousands of dollars worth of equipment are entrusted to *his* care, not to one of the workers on the course.

He does love his work. If he did not, he would be doing something else. He loves you and wants to make the best living he can for you. You say he has competent help and he does, but if any one of those men were as competent as he, he would be superintendent, not your husband.

A wife must remember that chinch bugs, beetles and worms have no respect for what you might want to do. The insects are hungry and their one object is to eat as much as they can before they are discovered. Disease strikes any time conditions are right

and it has no regard for what you have planned. Of course the summer rains are needed, but your husband didn't ask for them to come down in torrents to wash out sand buckers, stand in puddles all over his golf course and, when the sun comes out, cook his grass like spinach. Summer downpour have also been known to wash out newly seeded areas and destroy important construction work he has started. Plans must often be changed.

Our men, the superintendents, are almost in the genius class. They are doctors who identify and cure diseases of the grass; entomologists who identify and destroy the insects and worms, part-time lawyers who know the legal codes of town, city, county, state and federal governments regarding electricity, gas, gasoline and noise levels. They must know what, how much and how often different chemicals can be used, labor laws and building codes. They are engineers, for they must rebuild or construct greens, tees, fairways, bridges, car paths and in some cases buildings. They are diplomats maintaining good relations with their members, club officials, their employees, other superintendents, salesmen and various groups within their professional sphere.

Our men are great people but to be at their best, they need our understanding and our cooperation. Your man may need to release tension by talking to you. He isn't really asking for advice, just for the one he loves to listen to him. Often problems resolve themselves just by talking about them. He needs to know you love him and that you understand that he loves you. You may not understand his problems and be able to give advice, but if you don't listen, you never will understand that it is his self-respect, his integrity and his desire to make the best living he can for you that keeps him on the job when you want him home.

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## **Gowanie Golf Club Meeting**

Gowanie Golf Club was the site of the June 28, 1977 meeting of the MBCGCSA. Despite some very hot, muggy weather, Host Superintendent, Jay Delcamp, had the golf course in excellent playing condition.

The golf portion of the meeting was highlighted by a fine 73 shot by Chris Meyer, Superintendent, Bloomfield Hills C.C. This should lower the handicap sharply. If Chris keeps this up, we may have another candidate for the golf team.

Our guest speaker for the evening was Henry Lyons, representative of the Upjohn Company. Henry's talk was part of his salesmanship series entitled "The Art of Effective Listening."

One of the main points brought out was that we as individuals can listen much faster than people talk and, therefore, we get bored and are easily

distracted. The key then to becoming better listeners is to improve our concentration. A good exercise proposed by Henry was to listen intently for just one minute to a speaker. You'll be surprised at how much you'll absorb.

### **SCHEDULED MEETINGS - 1977**

- September 12 or 13, 1977  
Forest Lake Country Club
- September 19, 1977  
GOLF DAY
- October 4, 1977  
Maple Lane Golf Club
- October 25, 1977  
Rochester Golf Club

# Preparing Turf to Survive a Drought

by VICTOR A. GIBEAULT

Many western turfgrass facilities will face a serious water deficit this summer. The extremely dry winter of 1976-77 has resulted in a reduced snow pack, limited reservoir supplies, and an overdraft of groundwater in many western states. Most water districts, agencies, and elected officials today are still only talking about water conservation urging voluntary reductions in water use. However, some water districts already have imposed mandatory water rationing, and in those areas the situation throughout the summer can only worsen. Therefore, it is essential for turf managers in drought-affected locales to know what their water supplies will be for the summer months and to plan accordingly.

Under normal conditions, planning for summer irrigation usually consists of ensuring that the irrigation budget will be adequate, performing preventative maintenance on the irrigation system, and then irrigating "as needed." This year, planning also must include methods to increase irrigation efficiency by modifying management practices and, in some instances, redesigning the area for selective survival of turf.

## *Drought Tolerance*

One of the first questions that must be answered in an impending dry year is the drought tolerance of the various commonly used grass species. To produce a quality sward, all turfgrasses require applied water or rainfall in amounts equal to or greater than the water they use and lose through evapotranspiration in a given time. When drought conditions exist and total water application is less than evapotranspiration or is eliminated, grasses do differ in their responses to these conditions. Turfgrasses

commonly used are ranked according to their drought tolerance in Table 1.

TABLE 1. The comparative drought tolerance of commonly used turfgrasses (6).

Good Drought Tolerance



Poor Drought Tolerance

Improved bermuda  
Zoysia  
Common bermuda  
Tall fescue  
Red fescue  
Kentucky bluegrass  
Meadow fescue  
St. Augustine  
Colonial bent  
Creeping bent

In general, warm-season or subtropical grasses are more drought tolerant than cool-season or temperate grasses. Grasses with deep root systems have better drought tolerance than shallow-rooted grasses. Bermuda and zoysia, for example, frequently have root systems that penetrate 6 to 8 feet deep, providing them with a tremendous soil water reservoir for plant growth and survival. In contrast, well-maintained Kentucky bluegrass has a 6 to 12-inch root system and closely mowed creeping bentgrass a 2 to 6-inch root system.

In a study at the University of California, Davis, Dr. John Madison (3) removed all irrigation from selected turf plots for 120 days. Thereafter, he resumed normal watering and observed the recovery of various turf species. Under his conditions, he found that bermuda, zoysia, and tall fescue recovered well in 15 days. "Highland" bent recovered in five months, while Kentucky bluegrass and red fescue showed poor recovery. Note that the deepest rooted species recovered fastest. There are limits to the drought tolerance of each species beyond which the grass sward will not survive, as was evident from the Kentucky bluegrass and red fescue plots.

Madison concluded that there is a "high genetic potential for drought

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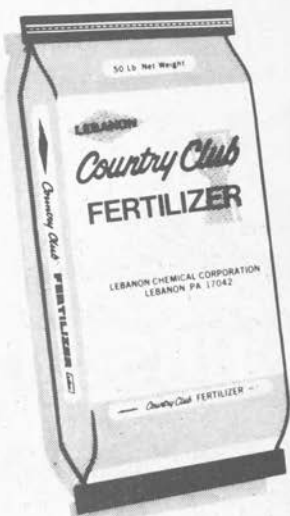


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## Preparing Turf Cont.

tolerance among turfgrass species but it has not been exploited." Fortunately, current research at Colorado State University by Dr. J. Butler is examining the drought tolerance of turfgrass species and varieties as well as the influence of management practices on drought tolerance.

To conclude this discussion, grasses do differ in their drought tolerance, their ability to survive extreme drought conditions is in large part due to their root system depth, and there is a drought limit beyond which sward survival is affected.

### *Review Management Practices*

Mowing, fertilization, irrigation, vertical mowing and coring are the five primary management practices regularly used in turf management. During dry periods, these practices should be evaluated and adjusted in terms of maximizing turfgrass drought tolerance.

With respect to mowing height and frequency, the first consideration must

be the requirements imposed by the use of the facility. Using a golf course for example, a putting green must be maintained in the 3/16- to 5/16- inch height range, a tee slightly higher, and a fairway from 1/2 to 1 1/4 inches depending on player preference and the grass species used. If it becomes necessary to prepare a turfgrass for drought tolerance, increase its cutting height to the highest allowable height within the use-mandated range. This will result in a deeper root system with an increased soil water extraction capability (2). Also, the higher cutting height will shade crowns and soil during periods of high temperature. It should be understood that research (5) indicated the higher cut turf will use more water by evapotranspiration. However, I believe that the deeper root system will result in a stronger plant with a greater water foraging potential and, therefore, greater drought tolerance.

Continued on Page 12

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## Preparing Turf Cont.

Research has shown (5) that water use increases as mowing frequency increases; therefore, it is best for drought tolerance to mow as infrequently as possible, again within the confines of facility use.

As for a drought tolerance nutritional program, a soil test will indicate needed addition or adjustments of phosphorus, potassium, pH, and salt load for optimum turfgrass growth. Such correction should be made immediately, before temperatures increase. Nitrogen fertilization should be eliminated whenever possible from the management program during late spring and through the summer, especially on cool-season turfgrasses. If it is determined that nitrogen must be applied because of play or use, then light, infrequent applications should be considered, because moderate or heavy nitrogen application during the spring and summer will reduce the depth and amount of rooting and will result in a higher water use because of stimulated topgrowth. Certainly, lush topgrowth is to be avoided if drought tolerance or water conservation is a consideration.

Thatch control and coring are important management practices in a dry year because both processes tend to increase irrigation efficiency. Thatch and compaction can reduce water entry into a soil profile, thereby resulting in wasted water from runoff or evaporation. Similarly, thatch and compaction restrict nutrient and air entry into the soil which reduces the rooting needed for maximum drought tolerance.

Irrigation is by far the most important management practice when preparing for drought; every effort should be made to increase watering efficiency. The following checklist can be helpful in this regard. While pursuing the points mentioned in this checklist, remember that the objective of irrigation is to replace water used by evapotranspiration of the turf as

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# Turf Topics

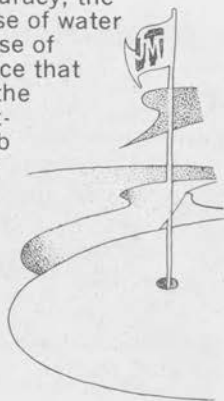
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infrequently as possible.

*Determine rooting depth.* Since the objective of irrigation is to replace water in the soil profile to the depth of turfgrass roots, knowledge of root system depth is essential.

*Determine soil water holding capacity.* Soils differ in their ability to hold water for plant absorption. Table 2 (1) indicates the amount of available water per unit depth.

TABLE 2. Available and unavailable water per foot of soil (1).

Soil Texture	Inches per Foot	
	Available	Unavailable
Sand	0.4-1.0	0.2-0.8
Sandy Loam	0.9-1.3	0.9-1.4
Loam	1.3-2.0	1.4-2.0
Silt Loam	2.0-2.1	2.0-2.4
Clay Loam	1.8-2.1	2.4-2.7
Clay	1.8-1.9	2.7-2.9

*Evapotranspiration (ET) rate.*

The rate of water used is largely governed by the climate. Of extreme importance are factors such as: radiant energy (ET increases as radiant energy increases), temperature (ET increases as temperature increases), humidity (as humidity increases, ET decreases) and wind (as wind increases, ET increases). Other factors such as rainfall, soil fertility, growing season, cutting height and frequency also influence water use.

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- \*One ton of sand will cover 66 square feet at a depth of four inches or 44 square feet at a depth of six inches.
- \*Average sand trap will use five to eight tons of trap sand at a four-inch to six-inch depth.
- \*Formula to determine amount of trap sand required:  
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It is true that very few cases of minor element deficiency have shown up in naturally growing turfgrass. These are almost entirely confined to iron on alkaline soils or to temperamental grasses such as centipede in the Southeast. As far as I know, there has been only one or two other cases of minor element deficiency in lawns, such as copper on peculiar Florida soils.

This is not to imply we have mastered the role major elements play.

Take phosphorus, for example. It is very important to the seedbed and to good rooting. But why does it frequently immobilize in the soil,

although not necessarily unavailable to the plant root? Why does it interact with other elements, "counteracting" arsenic influences, for example? The answers are not yet clear to us.

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## Potash Cont.

tolerance of Tifdwarf and Tifgreen bermudagrasses. High nitrogen and low potassium give the least resistance to cold. Greatest winter hardiness comes when potassium about equals nitrogen. But half to two-thirds as much potassium as nitrogen seems ample for winter-tender varieties to be used many miles further northwestward.

Gilbert's literature survey shows that potassium, when adequately balanced with nitrogen, helps northern grasses (bluegrass and bent) better tolerate both low and high temperature. WASHINGTON (Goss and Gould) Have reported that high nitrogen and low potassium cause non-protein nitrogen and unused carbohydrates to accumulate. Such a physiological condition, they theorized, favors disease invasion. And they found ample potassium suppressing *Ophiobolus* disease in the field.

FLORIDA-IOWA (Markland and Roberts) Have called for the right

nutrient "balance," noting that potassium influences root growth and foliage stiffening. Horn of Florida believes adequate potassium improves growth, quality, and behavior on most southern grasses.

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Sincerely,  
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Extension Horticultural Agent

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Many golf course officials are unaware of the need for updating agronomic information in order to produce the playing conditions they want.

**SEGUY'S SPACE:**

**SOMETHING TO REFLECT ON  
WITH THE COMING OF SUMMER ...**

"Slow me down, Lord!  
Ease the pounding of my heart  
By the quieting of my mind.  
Steady my hurried pace  
With a vision of the eternal reach of time.  
Give me,  
Amidst the confusion of my day,  
The calmness of the everlasting hills,  
Break the tensions of my nerves  
With the soothing music of the singing streams  
That live in my memory.  
Help me to know  
The magical restoring power of sleep.  
Teach me the art  
Of taking minute vacations of slowing down  
to look at a flower:  
to chat with an old friend or make a new one;  
to pat a stray dog;  
to watch a spider build a web:  
to smile at a child;  
or to read a few lines from a good book.  
Remind me each day  
That the race is not always to the swift;  
That there is more to life than increasing its speed.  
Let me look upward  
Into the branches of the towering oak  
And know that it grew great and strong  
Because it grew slowly and well.  
Slow me down, Lord,  
And inspire me to send my roots deep  
Into the soil of life's enduring values  
That I may grow toward the stars  
Of my greater destiny."

**Credit: The Bonnie Greensward, July 1977**



## The New \*Turf-Blo from Turf-Vac

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\*Patent applied for

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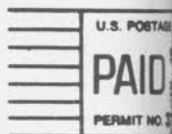
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