

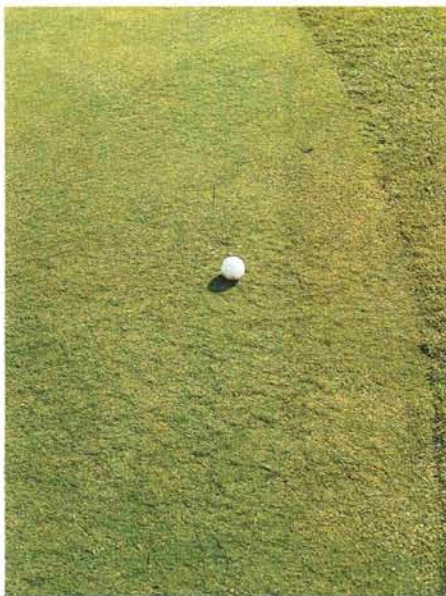
TURF TIPS — MORE OF THE BEST

"SHAKE, RATTLE, AND ROLL!"

by LARRY GILHULY
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YOU'VE SEEN the commercial, "Tastes great! . . . Less filling!" For a moment, replace these words with, "Fast greens! . . . Healthy turf!" The image is vivid. The players with single-digit handicaps demand ultra-fast greens without considering the negatives. The golf course superintendent strives for a healthy stand of turf to combat environmental extremes. It is a problem that has been with us for years; however, a technique viewed this past year may provide some workable answers allowing both sides of this dilemma to reach an agreeable and positive solution.

The golfer desires a medium-fast to fast playing surface that is smooth, consistent, and somewhat firm. The golf course superintendent often desires these same characteristics, but without placing the turf in jeopardy. The usual



Varying Poa annua growth habits is a common problem that can be addressed by water aerification and rolling, better known as "squirting and squashing."

maintenance programs of reducing mowing height, double mowing, vertical mowing, grooming, light topdressing, and reducing fertility can all produce positive results. Unfortunately, when mowing heights are lowered at the wrong time, the greens and the superintendent can end up in the same location . . . gone!

Superintendent Dean Gump, of Pasatiempo Golf Club, in Santa Cruz, California, experienced this same dilemma in 1992. Through a combination of new equipment and common sense, he has found a system that has changed persistently bumpy *Poa annua* greens into smoother, faster, and healthier surfaces while raising mowing heights, not lowering them!

The first step was to reduce surface disruption caused by multiple aerifications. With the introduction of water

Rolling greens can be another good tool in achieving desired green speed.



aerification, this technique reduced (not eliminated!) standard core aerification while increasing the total number of aerifications. The greens were smoother, yet the perennial *Poa annua* still possessed inconsistent characteristics. It was time to introduce the concept of green rolling. With monthly aerification to relieve compaction, Superintendent Gump began a program of rolling greens on Wednesdays and Saturdays. The results were instantly positive as far as the membership was concerned and produced the following changes:

1. Reduced mowing frequency from 7 days per week to 5 days per week.
2. Discontinued all double-mowing practices.

3. Decreased labor time spend on greens.

4. A virtual halt to player complaints. These positive results benefitted the overall golf course maintenance operation. The growth and playing characteristics of the greens, however, have also changed:

1. An increase in mowing height from .15" (between 9/64" and 5/32") to .17" (11/64").
2. A consistent increase in overall average speed from 8'6" to 9'6".
3. An overall improvement in surface smoothness and a reduction in foot-printing.
4. Improved daily consistency and surface firmness.

5. An apparent increase in rooting depth.

6. A slight reduction in pesticide use and a slight increase in bentgrass.

The program described here has been used for approximately one year and continues to produce outstanding results. Are you faced with similar problems? One point that definitely rings true is that any program that can potentially minimize pesticide usage, produce healthier turf, and provide a desired putting green speed with good surface smoothness is worth a demonstration. It may well be worth the effort to do what the song says: "Shake, Rattle, and Roll!"

A Tall Tale from the Great White North

by JAMES E. SKORULSKI

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TOO MANY OF US have faced the predicament of convincing well-intentioned golfers that a particular tree, although pretty and valuable, should be removed because of its negative effect on turf quality or play. Superintendents, informed Green Chairmen, and yes, even Green Section agronomists have been psychologically bloodied after recommending the removal of a mature tree that, in the golfer's eye, could not possibly be responsible for all those nasty problems.

Perhaps there is a light at the end of the tunnel, at least for those golf courses in the northern latitudes of the United States and Canada. No longer does the recommendation have to only be to remove a tree. Instead, it might sound more like "move it or lose it." This new option is a result of work completed by Jean Payette, retired superintendent, and Norman Hunt, golf professional, at the Mount Bruno Country Club, in St. Bruno, Quebec.

Payette and Hunt have devised a transplanting technique which they have successfully used to move large 30' to 40' trees at Mount Bruno Country Club. The transplanting technique was first used at the club to replace several strategic and aesthetically important elm trees lost to disease. It enabled the club to replace those trees with mature

trees found on the property. The operation has been used to move red and white pine, and red, sugar, and silver maple trees that were considered too large or too costly to move with the more conventional tree spade technique.

The procedure is not complicated, but it does require a dozer in the D-8 class and an experienced operator. A backhoe also is helpful for trenching work and excavating the new planting hole. The ground must be frozen to minimize disruption of the root ball and allow for effective transport of the excavated tree. Excavation work is initiated in late fall while the soil is still workable.

The first step is to roughly trench around the tree with a backhoe or trenching machine, taking care not to damage the root ball. Two sides of the trench are then further excavated to provide access for the dozer blade to reach the root ball. Roots severed during the excavation should be cut cleanly around the edge of the root ball, and the final excavation and undercut work should be completed by hand.

The planting hole at the new site is executed to the same depth and dimensions. The sides of the new hole also are excavated to form a gentle grade that will permit easy access for the incoming transplant. Finally, several

stakes are implanted around the hole to serve as anchors for the future transplant.

The size of the root ball is obviously dependent on the size of the tree, and more specifically, the trunk diameter at breast height (DBH). A general recommendation given by arborists is to size the root ball diameter approximately 10 times the tree's DBH. Since most roots are in the upper soil profile, the root ball should be sized about 30" deep. This is a general recommendation, and successful transplants have been completed at Mr. Bruno Country Club in which the root ball dimensions were below the recommended size. Generally, Payette sizes the root ball so that it can be conveniently moved with the available dozer.

Moving the trees is not attempted until winter, when the ground has frozen thoroughly. At that time, the dozer and experienced operator are brought in to complete the operation. Payette stresses that it is most important to have an experienced operator carefully and slowly break the root ball free from the soil. Once free, the tree is pushed from the hole to the new planting site, where it is carefully pushed into the awaiting hole. If the new hole's dimensions are incorrect or if the tree is not straight, the transplant is pushed out