TO SEED OR NOT TO SEED

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Washed sod eliminates the problems associated with clay or peat layers in the root zone, but keep in mind that a thin layer of washed "thatch" is introduced into the green. The turf will still require aeration, spiking, etc., to minimize the detrimental effects of the layer.

T SOME POINT in their careers, most golf course superintendents will face the task of rebuilding a green or tee, but the challenge can be met if the necessary labor and equipment are provided. We envision opening a new green that possesses a firm, smooth surface and a challenging putting speed, conditions consistent with the other greens on the course. Green committee chairmen or course owners expect the same results, but they seldom understand the process of construction, especially the amount of time it takes to provide highquality conditions on a new putting green. They invariably will request that the green be sodded so it can be opened for play sooner, "You know, like that course over on the other side of town that held a tournament two weeks after their new green was sodded."

Herein lies the problem: We know that a sodded green can be opened sooner than a seeded green, but it will require more attention down the road if a layer of clay, thatch, muck, etc., is introduced with the sod in the upper root zone. Although the advent of washed sod has reduced this problem, frequent cultivation is needed to avoid a decline in turfgrass quality during the midsummer heat stress period.

We Will Sell No Wine Before Its Time

"We will sell no wine before its time," was a popular advertising phrase a few years back. Unfortunately, grapes are allowed all the time they need to become wine, but when it comes to turf, the golfers want immediate results. Why sod a green when we can have a seeded green open after 90 *good* growing days? Very few of us have the luxury of growing-in a green without pressure from golfers to open it before it is ready. The recent availability of washed sod may provide the opportunity to open a green a bit sooner, but a review of the advantages and disadvantages of sodding or seeding greens is needed to make an informed decision.

Sodding a Green

Advantages

- 1. *Instant Turf* Under ideal growing conditions, a sodded green can be ready for limited play in approximately 30 days.
- Consistency The presence of a thin organic matter layer provides the surface resiliency needed to hold a shot with backspin; the greens play more like a "mature" green.
- Washouts Sod, unlike a seeded surface, is less likely to wash out under heavy rainfall.

Disadvantages

- Expense Seed for a 5,000 sq. ft. green costs about \$300, whereas sod costs almost \$4,000.
- 2. Limited Varieties In general, only Penncross and a very limited amount of Pennlinks sod are available, although other new cultivars are available in some areas.

3. Layers — Unless the sod is grown on the same root zone mix used to build the green, a layer of clay, muck, etc. is introduced into the green with the sod. Layers slow the movement of water through the green, limit root growth, and require a program of frequent cultivation.

Another consideration is that a properly sodded green appears to be ready for play within several days. This can create a problem for over-zealous golfers who think it should be opened "before its time." Communication is important and everyone must understand that although it looks good, it's not ready for traffic.

Seeding a Green

Advantages

- 1. Choice The superintendent has the choice of any of the newer, improved varieties of creeping bentgrass on the market.
- Experience As the green becomes established, the superintendent becomes familiar with the unique fertilizer and irrigation requirements needed to provide consistent playing conditions on a high-sandcontent root zone mix.
- Layers Well-timed applications of topdressing minimize the development of undesirable layers in the upper root zone.

Disadvantages

Time — In the northern tier of states,
a green seeded during August will not be

ready for play until the following May or early June, even under ideal conditions. A longer grow-in will be needed if the fall or spring is unusually cool.

- 2. Washouts Heavy rain can wash seed from high to low spots, and the result is inconsistent coverage and the need to reseed localized areas.
- 3. "Hard Greens" Until a thin cushion of organic matter develops in the upper root zone, a new green will be less receptive to an approach shot.

We have recently rebuilt several greens at Naperville Country Club. One of the greens was sodded and another was seeded, so a comparison of each method can be made. Washed sod was not available, so we used sod grown on a medium similar to the 80:20 mix used to build the green. We laid the sod on November 9, 1989, and opened the green on May 1, 1990. I was prepared for problems with layering, so on April 16 we began our cultivation program. Aerification with 1/8-inch tines was done on a three- to five-week schedule, and 1/4-inch-diameter quadratines were used during July and August. The green was aerified six times the first season, six times the second season, and three times the third. The root system on the sodded green deteriorated quickly during July and August of the first few years. After an extreme period of heat stress, most of the roots became confined to the original sod layer. Now in its fourth year, it is finally beginning to maintain a root system beyond the thatch layer all season long.

On August 2, 1991, we seeded our new practice putting green. It was ready for a limited amount of play on October 1, but

we decided to keep it closed until the 1992 season. It wasn't aerified the first season, and it received the usual spring/fall aerification this year. There was no significant decline in July and August, and there was strong root growth well beyond the thatch layer, even when soil temperatures were high.

Communication is the key to a successful greens renovation project, regardless of which method is used! When we sodded the second green, the members were informed of the aeration schedule for the following season and were prepared well in advance. Provide realistic projections for opening a new green, not what the golfers want to hear. Other tips for success:

- If you decide to use sod, check with the supplier about its availability well in advance of the project.
- A USGA green is designed to resist compaction, so don't be afraid to roll and roll the sod.
- Even a washed sod introduces a "washed" thatch layer into the green, so aerify as soon, and as often, as possible. If the sod is not pegged down enough to allow standard hollow-tine aeration, try using a Hydroject aerifier. With all the force directed "down," there is little potential to lift the sod.
- If you decide to use seed, plant early in the fall to provide enough time for the seedlings to develop and harden off before winter.
- Use tried-and-true seeding rates two pounds per 1,000 sq. ft. Ultra-high rates may provide quick cover, but crowded seedlings mature at a slower rate than seedlings provided with a bit of growing room.

- Roll the seed bed to establish good seed-to-soil contact. Don't overlook this. We found that the knobby tires on our bunker rake did a great job.
- Don't verticut the first year. Remember, you are trying to obtain dense coverage. You may see more spiking from golf shoes, but the green will develop a cushion of organic matter faster, and the playing surface will not be so "hard" the first season.
- Developing the fertilizer program for a new sand green is another article in itself. Sand/peat greens require light, frequent applications of fertilizer, especially during the first year much more than soil greens. Remember that a sodded green will thin out quickly, as quickly as a seeded green, unless adequate amounts of fertilizer are applied.
- Provide a *playable* temporary green to keep golfers off your back. Choose the site well before construction begins, then aerify and topdress before lowering the height of cut. If you begin this process in the spring, there will be less scalping and a better interim putting surface. This results in less pressure to open the new green before it is ready.

Be flexible. If you cannot take the green out of play in August, then construction during September and the use of sod may be the best option. On the other hand, if you want to try a different variety of bent-grass and have the time for grow-in, then seeding is the best choice. Remember — either way you go, insist on the proper time frame to ensure the best results possible. In other words, "sell no wine before its time," because "you can't win when the green is thin."

With careful management, especially adequate inputs of fertilizer, a seeded green can develop rapidly. In contrast, lack of nutrients can leave the turf thin. For example, the green on the left is three weeks old; the green on the right is three months old.



