Nursery Green Wanted

Why 18 greens are not enough.

BY TY McCLELLAN

ost golf facilities have 18 regulation putting greens and a practice green. Sometimes there may be a chipping green or two as well. What happens when turf loss or damage to putting greens occurs? Sometimes repairs can be completed by seeding or sprigging, but these options require lengthy grow-in periods. When a more immediate solution is needed, sodding is the answer. When this happens, where will you turn for sod? For those golf facilities without a nursery green, there are three lessthan-ideal options.

1. Harvest your own sod from a green that is in use. For this option the



donor green of choice is generally a chipping green or practice putting green. Cutting sod from either detracts from both their appearance and functionality.

2. Occasionally, sod may be secured from a neighboring golf facility. However, there are often significant differences in the composition of the turf and the makeup of the rootzone on which it is grown. Either can result in sod patches that remain highly visible for months or even years.

3. For many parts of the country there are sod producers that maintain some of their products at putting green mowing heights. However, there are so



Poorly matched sod repairs are impossible to hide. An on-site nursery green with compatible sod eliminates this problem for putting surfaces and collars.

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many newer, improved bentgrass and bermudagrass cultivars today that sod producers cannot possibly have all of them available at all times. Instead, sod producers generally specialize in a few of the most common varieties in their region, so this is not always an option when seeking sod on short notice for your facility.

The unfortunate truth is that far too often there is no recovery plan in place when golf facilities are faced with immediate sod repairs. Ideally, sod would be available at your golf facility that is of the same variety, established on the same rootzone, of the same age and maturity, grown in the same environment, and receives the same inputs and management as turf on the regulation putting greens. This is the only way to ensure an ideal match when harvesting sod for repair on greens. And when sod repairs are performed, how do you do it seamlessly, guickly, and without taking practice greens out of play? A nursery green is your solution to all of the above.

While the scenarios discussed to this point are more of the emergency variety, nursery greens have far more value than just as a source of sod in times of need. As you will learn, they are also the perfect setting for evaluating new products, demonstrating equipment, or fine tuning any of your maintenance and cultural practices or fertilizer and plant-protectant programs. Nursery greens have the potential to elevate the condition of all other greens on the property, and this is to the benefit of the golf facility and its patrons.

This article will outline the purpose of nursery greens and the reasons why every golf facility needs one. Also discussed will be thoughts for site selection, construction, establishment, and management.

FIVE REASONS FOR A NURSERY GREEN

1. A Genetic Match, i.e., Same Turfgrass Cultivar — There are so many turf varieties available today that sod producers simply cannot grow them all. Furthermore, ongoing research and advancements in turfgrass breeding continue to identify newer improved

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The unfortunate truth is that vandalism, hydraulic leaks, and storm damage can and do occur to putting surfaces. With a nursery green, the grounds crew has an on-site sod source to make same-day repairs.



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Harvesting sod from a practice green to make needed repairs to a regulation putting green takes it out of play (or is disruptive to practice at the very least) and is visible to everyone, especially if near the clubhouse. A nursery green could be used instead for a sod source.

bentgrass and bermudagrass cultivars, so the number of turfgrass options continues to rise. It is true that some of the newer bentgrass and bermudagrass varieties are similar enough in appearance, performance, and management needs that they may be used for sod repair of greens and collars when the same cultivar isn't available. However, the only way to ensure an exact match is to have the same cultivar being grown under your site conditions and your management regime. The days are long past when the majority of bentgrass on golf courses and grown by sod producers was Penncross originally released in 1955 as the first seeded bentgrass variety - or most every bermudagrass green and sod source was Tifgreen, commonly known as 328. Regional sod producers cannot provide every variety of bentgrass and bermudagrass for every golf facility, nor can they replicate the same bentgrass/Poa annua mix for those with older cool-season greens. All told, a nursery green makes sense so that you have a sod source on hand that is a genetic match to your greens.

2. Perfect Sod Compatibility — A nursery green established with the same turfgrass variety on the same rootzone and receiving all the same management inputs — fertilizers, plant protectants, cultivation, etc. — is the best way to ensure compatible sod for your greens. Ideally, the nursery green should be established at the same time as the regulation greens so that the turf is the same age with the same level of thatch and mat development. It can be a big problem when trying to place sod that is just a year or two old into a green where the turf is much more established and has thicker, more developed mat and thatch regions. When this occurs, the newly laid sod can look and feel different from the rest of the green and can take several years of aeration and topdressing to blend in.

3. Timely Sod Repairs — With a nursery green on site, there is no waiting or searching for suitable sod. This allows repairs to be accomplished when it is best for the facility rather than when an outside source can work it into their schedule. If there is no time to wait for recovery through seeding or sprigging, sodding immediately is your answer. Not only is a nursery green ideal as a source of sod for putting surfaces, but collars too. Simply maintain a portion of the nursery green at the collar height of cut and with the same turfgrass variety, if different from the putting surface.

4. Keep All Practice Greens Open for Play — For some facilities the practice greens also serve as sod



Interested in a new piece of equipment and wonder how it will perform at your location? Nursery greens are the perfect place for risk-free equipment demonstrations.



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©2014 by United States Golf Association. All rights reserved. Please see Policies for the Reuse of USGA Green Section Publications. Subscribe to the USGA Green Section Record. nurseries. This is a workable solution if there are multiple practice greens and only a small amount of sod is needed at any one time. However, when large amounts of sod are needed, the practice green's usefulness to players diminishes greatly. With so many players struggling to find time for golf, practice facilities have become very popular and are typically maintained at the same high level as the course. Also, out of convenience, practice greens are often located near the clubhouse and thus are highly visible to anyone who frequents the facility. A practice green that is full of holes and missing large patches of grass is unattractive, to say the least. With a nursery green, sacrificing a useful and highly visible practice green is no longer necessary.

5. Research, Testing, and Demonstrations — Nursery greens provide the ideal testing grounds for new products and maintenance practices, as well as equipment demonstrations. Obviously, regulation greens are the not the place for experimentation, so a nursery green serves as a practical and risk-free way to screen what will or will not work on the rest of the greens. Even for established practices and techniques, nursery greens can be used to fine tune programs, application rates, timing, protocols, etc. Test plots are an effective communication tool when demonstrating the value, or validating the use, of plant protectants to golfers. Seeing is believing, and test plots visually tell a very good story that everyone can easily understand.

RECOMMENDATIONS

Size of Nursery — There is no exact size that is perfect for every golf facility, but bigger is better. A small nursery is of little value if it can't meet the needs for sod, research, testing, or demonstrations. As such, there are two rules of thumb that have proven

useful. The first is for the nursery green to be twice the average size of the regulation putting greens, meaning if the average size of your putting greens is 5,000 square feet, then the nursery green should be 10,000 square feet or more. The second rule of thumb is for the nursery green to be larger than your largest putting green. This way there is enough sod to replace an entire green, if necessary, assuming it is the largest green that needs repair. Ideally, the nursery green satisfies both recommendations. Regardless, the nursery needs to be large enough to provide sod to accommodate all small projects and repairs. If damage or turf loss is too extensive, then large-scale renovation or regrassing is likely in order, and a nursery green of any practical size would not be sufficient.

Site Selection — Just like putting greens, turf health and performance will be much better for a nursery green



Test plots on nursery greens are a great way to evaluate plantprotectant products. They are also effective communication tools when demonstrating the value or validating the use of plant protectants to golfers.

Collars face high weed pressure and are often the last line of defense against contamination of unwanted turfgrasses into putting greens. If your facility must replace collars frequently, a nursery green is a valuable sod source for routine renovation work.



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For best results and matching sod, nursery greens should be constructed with the same materials and established with the same turf variety as the putting greens.



For seamless repairs and sod compatibility, the nursery green should be managed the same as regulation greens. This includes fertilizer inputs, plant protectant applications, mowing height, vertical mowing frequency, sand topdressing, and aeration.

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where there is sufficient air movement and sunlight exposure. Perhaps a small argument can be made that if greens are somewhat shaded and air circulation is modest, then the nursery green should be grown in a similar environment so that when sod is transferred from the nursery green to the golf course it will be adapted to its new site. However, keep in mind that turf needs to be healthy and possess enough sod strength for sodding to succeed, so be certain to error on the side of having too much sunlight exposure and air movement (if there is such a thing) than too little.

Construction — It is best if the nursery green is constructed using the same materials and same method as the regulation putting greens. However, this isn't an absolute necessity and many have had success constructing nursery greens similar to practice range tees. Since sod removal only goes an inch or two deep, as long as the upper rootzone of the nursery green matches the upper rootzone of the regulation putting greens, then the sod should be compatible. Just like putting greens and tees, surface drainage is critical. Subsurface may also be necessary if surface drainage is not sufficient. If in doubt, use the services of an accredited soil physical testing laboratory to identify rootzone materials to construct the nursery green that are compatible with regulation greens. Click here to learn more about accredited physical soil testing laboratories and to find the list of labs currently accredited by the American Association of Laboratory Accreditation.

Establishment — It is best to establish turf on a nursery green at the same time as the regulation greens. Of course, this only works for new construction or large-scale renovations. If adding a nursery green after the fact, consider using sprigs from deep vertical mowing (or dethatching) for bermudagrass or cores obtained from core aeration for bentgrass or *Poa annua* so that it best matches the turf stock already in place. If not, traditional seeding or sprigging can always be done. Sodding of turf that is just a year old or less into a green with a very

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mature stand of turf and a thick mat region can be a problem at first, but sodded areas will eventually mimic the rest of the green as years pass and organic matter continues to accumulate and sand topdressing is applied.

Management — The nursery green should be maintained the same as the rest of the putting greens. To ensure sod from the nursery is compatible with putting greens and ready to be used at a moment's notice, the nursery green should be given the same care and attention as the regulation greens. The one exception is nitrogen fertilization. If the nursery green does not do double duty as a practice green, traffic on the nursery will be so limited that lower nitrogen rates are in order to prevent excess organic matter production and possible thatch problems.

CONCLUSION

Turf nurseries should not be viewed as a luxury; rather, they serve both practical and responsible purposes for golf facilities. Summarized below are important take-home messages to remember as consideration is given to a turf nursery at your golf facility.

First, nurseries are the best, and sometimes only, way to ensure matching and compatible sod for quick repair of greens and collars in times of need at your facility. Try to place a monetary value on this should vandalism or turf loss occur at the worst possible time, say before a notable championship or prominent outing.

Second, when sod repairs are needed, practice greens do not have to be sacrificed as a source of sod if a nursery green is available. Golf is a game of practice, and keeping practice areas in play is important to the economic viability of the golf facility and the enjoyment of golfers.

Third, nurseries serve as the testing and research center for evaluating new products, equipment, or practices on your turfgrass(es) at your location under your environmental conditions. For obvious reasons, putting greens that are in play are not well suited for experimentation. Adverse effects and damage can be avoided if testing is first performed on a nursery green.

Understandably, there may be some opposition to the added cost of constructing and maintaining a nursery green. After all, aren't we trying to reduce expenses, inputs, and sometimes even the acreage of highly maintained turf? Granted, there are areas of the golf course where cost savings make sense, but putting surfaces, which comprise just three acres of turf for most 18-hole facilities, should be the last place to look for budget cuts. Instead, consider a nursery green as insurance for the most prized playing areas (putting greens) on the most important and valuable asset (the golf course) of the golf facility. Now that's money well spent.

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Better safe than sorry. When sod is needed to repair putting surfaces, will you be ready? A nursery green is like an insurance policy that you hope you never have to rely on, but you're covered if you do.

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