Practice facilities are important and play a valuable role at golf facilities. Many courses have invested in practice facility improvements, expansions, and upgrades in recent years. Are you wondering whether improvements to your practice facilities would be worthwhile? Have you considered all the different options? Learning about the history of practice facilities and the importance of design, use, and maintenance will help you create a safe and fun area where players can work on their game.

**PRACTICE FACILITY HISTORY**

In the early 1900s, golf instruction was generally given in the form of playing lessons and little thought was given to practice facilities. Perhaps the earliest recorded history of practice facilities in the United States was at Pinehurst Golf Resort in North Carolina in 1913 when Donald Ross designed a practice area by relocating the first, second, and 18th holes of Course No. 1. The practice area was an immediate hit and eventually earned the nickname Maniac Hill, presumably in reference to the numerous golf addicts who tried to hone their skills there.

In 1926, Maynard Metcalf, a Chicago-area golf course superintendent, bemoaned the lack of adequate practice facilities in an article he wrote for the *Bulletin of the Green Section of the United States Golf Association*:

“Practice ground of sufficient size and proper character for driving, for short and long approaching by run up, pitch and run, or dead-stop shots, for shots out of sand traps and out of rough and for putting should be Unlimited range ball programs sparked a tremendous increase in practice. As a result, practice tees have been expanded to accommodate the extra wear and tear.
Consolidating divots in small areas leads to severe turf damage and extremely slow recovery. Although less area may be damaged, the slow recovery negates any benefits.

provided in connection with every course which is designed to train good golfers; and ground for lessons with open-front rain shelters for instruction should also be provided.”

Metcalf understood the importance of practice facilities long before most others. However, it took many years before golfers realized the potential value of practice facilities and began investing in them. Early practice facilities were neither elaborate nor large, and they received minimal maintenance, likely adversely affecting their popularity and usage. These facilities typically consisted of a putting green, possibly a chipping green, and a field or driving range where golfers could hit their own practice balls. Caddies often gathered the balls for their employers, sometimes using baseball mitts to catch balls hit to them. Later, courses began selling practice balls by the bucket or bag.

Practice facilities did not seem to receive concentrated and thoughtful innovation or intensive maintenance until much later. In the early 1980s, USGA Green Section National Director Al Radko stated:

“Practice ranges at golf courses are often an eyesore in an otherwise plush setting. The range, a most desirable facility, is too frequently neglected in the budget and is given little incentive for improvement.”

In a 1982 USGA Green Section Record article, agronomist William Brewer wrote that 4,500 square feet of practice teeing area might be enough for some courses, but others might need five times that amount. In a modern context, even the higher number would be woefully inadequate at many courses. What caused such a dramatic shift in the popularity of practice?

Several key changes occurred that sparked a tremendous increase in the popularity of practice. The surge prompted many to place much greater emphasis on having good practice facilities where golfers could work on all facets of their game.

UNLIMITED RANGE BALL PROGRAMS

For years, it was customary for courses to sell practice balls by the bag or bucket. As a result, golfers hit fewer practice balls. Recently, golf courses have started charging for range balls on a yearly basis, rather than by the bucket, causing a profound effect on golfer practice habits. Driving range use sharply increased at

Some golfers like to scatter their divots. This causes more damage because each swing produces a full divot.
courses that initiated unlimited range ball programs. Golfers who once hit a small bucket to warm up before a round of golf suddenly began hitting buckets of golf balls.

**INCREASED EMPHASIS ON PRACTICE**

Golfers have long realized that improving their game requires practice. Golf instructors and pupils need areas to teach, learn, and practice the game. While many golfers are satisfied with simply hitting a few golf balls to warm up before their round, others want better, larger, and more varied practice facilities where they can spend time hitting balls and working on different aspects of their golf game.

**LIMITED FREE TIME**

For many, the increased popularity of practicing is partially due to a lack of free time. The time that it takes to play a round of golf and busy personal schedules can make it tough for golfers to play nine or 18 holes. Practice facilities provide a great opportunity for players who have limited free time.

**ADJUSTING TO THE DEMAND**

Golf courses recognize that good practice facilities are an attraction for many golfers and can serve as an effective marketing tool. Practice facilities also are ideal areas for introducing new golfers to the game.

Unlimited range ball programs stimulated a surge in practice that quickly laid waste to driving range tees everywhere. Many courses responded by expanding driving range tees, and some courses began experimenting with artificial turf surfaces. More than a few courses have expanded driving range practice tees multiple times in an effort to keep up with the dramatic increase in practice.

Having a practice tee with enough hitting area to maintain reasonable turf conditions is an important starting point, but today’s golfers want to do more than just hit balls on the driving range. In response, courses have installed practice bunkers, elaborate short-game practice areas, and par-3 courses to meet those desires. Innovative teaching aids such as video equipment, golf simulators, and launch monitors also are being incorporated into practice facility design.

Clearly, there are many good reasons to develop bigger and better practice facilities, so why don’t all courses have them? The most common answers are simple: lack of space and/or funding. In addition, maintaining heavily used practice facilities requires

---

*The best way to take divots on a practice tee is in a linear pattern by placing the ball on the turf immediately behind the preceding divot. Following a linear pattern, each swing will take less turf than a full divot. The resulting narrow lines heal more quickly than scattered or otherwise consolidated divot patterns.*

©2016 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.
labor and resources that are unavailable to some courses. However, given the popularity of practice, many courses would be wise to consider investing in their practice facilities.

**PRIORITIES**

In a perfect world, every golf course would have a large driving range with plenty of hitting area, a par-3 course, a short-game practice area, and one or more practice putting greens. In reality, golf courses have to do the best they can with their available resources, starting with a sound design that maximizes the available space.

**DESIGN CONSIDERATIONS**

A large practice tee with plenty of hitting area is ideal, but how big should it be? Determining the amount of hitting area needed can be difficult to calculate because it depends on several factors. Golfer profile, proximity to the pro shop and clubhouse, climate, and the periods of peak activity are just some of the factors that influence how heavily a range is used and how much hitting area is needed. Turf conditions also influence usage — better turf conditions often result in heavier use.

Paul Vermeulen, former director of the North Central Region of the USGA Green Section, developed a useful formula for determining adequate practice tee size. However, a sound motto for practice tee size is, “Bigger is better.” It is difficult to build a practice tee that is large enough to handle today’s intensive practice. In fact, some courses that expand their practice tee fail to see a major improvement in turf quality because use increases along with the expansion. Nevertheless, a large practice tee will support better turf conditions and may require less-intensive maintenance if wear can be effectively distributed.

When considering practice tee size, it is important to be aware that tee width can be as important as depth. Wider tees allow more golfers to practice at the same time, an important feature for courses where heavy play and shotgun starts are common. Wide tees also allow practice stations to be shifted laterally as well as forward and back, helping to spread the wear.

It is critically important to maximize the amount of usable teeing area when building new or expanding existing practice tees. The most efficient use of space dictates that large, single-level designs be utilized, but they may not be practical where elevation changes are severe. Multilevel designs help a tee fit more naturally into a steep site and can help golfers see the landing zone. However, valuable teeing space is lost to grade changes between levels, so, when space is limited and usage is heavy, the use of multilevel tees should be minimized.

Getting golfers to and from the practice facility without causing concentrated wear is another important design consideration. Golfer traffic patterns should be carefully studied.
and the practice facility design adjusted to minimize wear problems. Providing ample room for parking, foot traffic, and maintenance access will improve how a practice facility functions.

TURF SPECIES SELECTION
The unfortunate reality is that most courses have limited area, and range tees usually are smaller than ideal. Courses must be mindful of their turf species, climate, and usage patterns to maximize practice tee performance.

Warm-season grasses grow rapidly in hot, sunny weather but go dormant in the winter. Less teeing area may suffice during the summer when recovery is rapid, but significantly more area is needed during winter when growth and recovery are slow or suspended. If the primary playing season is winter, far more teeing area will be needed.

In areas where cool-season turf is grown and use is heavy, courses usually need one or two acres of usable hitting area to maintain reasonable turf quality without relying on artificial turf surfaces. Courses that experience heavy range usage may require even more area. Kentucky bluegrass and perennial ryegrass are the preferred species for practice tees in cool-season climates where usage is heavy. Bentgrass is only suitable for large and gently used practice tees because divots tend to be larger and recovery is slow.

Courses in the transition zone are increasingly maintaining practice tees with both warm-season and cool-season turf. Players practice on the cool-season turf areas during spring, fall, and winter, but they use the bermudagrass areas during the hot summer months when bermudagrass quickly recovers and cool-season grasses struggle. Golfers may want the turf on the practice tee to perfectly match the fairways, but this may not be practical and it could result in slow recovery depending upon the turf species.

GOLFERS CAN HELP
Golfer behavior can have a major impact on how a practice tee performs during the season. Patterns of use must be carefully managed to maximize teeing space and uniformly spread wear. Using ropes to define hitting areas is very helpful for guiding golfers.

How golfers practice also affects practice tee performance. For years, golfers took divots on the practice tee without much giving much thought to the turf. Worse yet, some golfers were encouraged to concentrate divot patterns to conserve turf. Concentrating divot patterns reduces the amount of turf being damaged, but the damage is so severe that the increased time and labor needed for recovery negates any benefits. A linear divot pattern, where each shot is struck from immediately behind the previous divot, is the best way to minimize damage and promote recovery. Educating golfers and monitoring their activity is an important part of practice facility management. Teaching golfers to Practice Like a Pro will result in less wear and faster recovery on your practice tee.

MAINTENANCE
Maintenance strategies have a tremendous impact on how much use a practice tee can withstand. Effective and aggressive management programs, combined with golfer cooperation, can have a hugely positive impact on conditions. Frequent fertilization, divot filling, seeding, and periodic resodding are practices that help maintain turf on heavily used practice tees. Irrigation systems designed to match wear patterns also can be an invaluable tool for promoting recovery.

Northern courses typically seed practice tees with perennial ryegrass because of its rapid germination and ability to tolerate traffic. However, perennial ryegrass does not form thatch, which is needed for surface strength and resiliency. Kentucky bluegrass forms thatch and tolerates traffic well, but it is extremely slow to germinate and establish. Therefore, a common technique is to sod practice tees with Kentucky bluegrass and then seed divots with perennial ryegrass. After a few years of heavy use, most of the bluegrass will be eliminated and there will only be a thin turf of perennial ryegrass. Once this stage is reached, it is time to start the process over again by resodding the practice tee. Regardless of the species, it is important to allow time in the fall for

Ball-retrieval equipment can damage turf, so be sure to consider traffic patterns when designing your driving range.
recovery. For warm- and cool-season species, this means closing the practice tee in time for the turf to regain full coverage before growth slows down and dormancy sets in. Some southern golf courses overseed bermudagrass practice areas with perennial ryegrass to provide color and turf recovery during the shoulder seasons when bermudagrass recovery is slow. However, non-dormant bermudagrass practice facilities are used throughout the year in many southern regions.

WHEN THE TEE JUST ISN’T BIG ENOUGH

No matter how large and well-managed a practice tee is, most courses still require players to use artificial turf when the grass tee needs time to recover. Often, courses with undersized practice tees need to use artificial surfaces during the growing season to prevent excessive wear on grass tees. In both northern and southern climates, using artificial tees during the shoulder seasons is an excellent strategy for avoiding damage and aiding recovery. Also, artificial tees should be used during periods of wet weather when the grass tee is softened and damage is magnified. An added benefit of artificial tees is that shelters can be constructed over them to give golfers protection from the sun and rain without limiting turf growth.

COMMON MISTAKES TO AVOID

Improving or maintaining the practice facility at the expense of the golf course is an egregious mistake. Practice facilities are wonderful, but the golf course should always come first. When a course has limited acreage, slight changes to a hole or two may be worthwhile to create room for a practice facility, but this should be done with the greatest care. More than a few courses have ruined good golf holes just to squeeze in a practice range.

Another common mistake is having too many target greens on a practice range. Target greens and yardage markers are worthwhile practice aids for golfers. Three to five target greens is sufficient for small- to medium-sized ranges, while longer ranges may benefit from one or two more. It is important to locate targets in the middle portion of the range to minimize the risk of miss-hit shots leaving the range. Locating target greens near the outer perimeter of the range should be avoided.

Elaborate target greens complete with real or artificial bunkers can be very attractive, but they require added maintenance and make retrieving balls more difficult and expensive. Turf damage caused by ball-retrieval equipment is magnified by sharp turns and steep topography. Furthermore, balls must be retrieved manually from bunkers. The visual benefits of bunkers must be weighed against the increased labor and potential traffic damage. Artificial bunkers created by removing sod and replacing it with a hard-packing sand or aggregate can create the illusion of a bunker without the associated turf damage and increased labor. However, hard materials can scuff practice balls, shortening their useful life.

Practice tees can be equipped with a host of accoutrements, and golf bag stands are particularly popular. Purchasing bag stands, club cleaners, yardage signs, and clocks is the first step in a chain reaction of expenses. Practice facility accessories must be frequently moved to avoid turf damage and periodically cleaned and repaired, costing time and money. Range tee accessories are nice additions, but when labor and budget dollars are tight, leave out the extras and focus resources on turfgrass management.

OTHER OPPORTUNITIES FOR COURSES WITH LIMITED SPACE

There are plenty of options for providing meaningful practice opportunities at courses that do not have enough room for a large practice facility. Limited-flight golf balls and nets allow golfers to practice safely in smaller areas. Some facilities allow golfers to see the takeoff trajectory of their shots by angling the netted ceiling. These popular facilities require much less space than a typical driving range and still offer a valuable practice experience. Consuming less space with a driving range may also leave room for other types of practice areas, such as a short-game area or practice bunkers.

SUMMARY

Practice facilities that are well built and well maintained are popular and valuable components of a golf facility.
They provide a place for players to warm up before their round, fine tune their skills, or receive instruction. They also give beginners a place to learn the game. Therefore, practice facilities deserve the same thoughtful consideration as other parts of a golf operation.

Hopefully this article has provided you with some ideas about how to improve your practice facility. The next step is to speak with a golf course architect and weigh all the varied options. For years golf courses have developed master plans to chart out programs for making architectural improvements; practice facilities deserve the same thoughtful consideration. Make no mistake, practice is popular and courses should do all they can to capitalize on that popularity.

**BIBLIOGRAPHY**


**DAVE OATIS** is the regional director of the Northeast Region and **TODD LOWE** is an agronomist in the Southeast Region.