



AGENDA
GOLF ADVISORY BOARD
CITY OF PORT ORANGE

Meeting Date: Tuesday, October 4, 2016

Time: 5:00 PM

Type of Meeting: Regular

Location: 2nd Floor Conference Room
City Hall, 1000 City Center Circle

A. CALL TO ORDER

1. Roll Call

B. DISCUSSION/ACTION

2. Approval of Minutes
3. USGA Report Implementation
4. Water
5. Security Issues
6. Golf Course Conditions Update
7. Meeting Day and Location

C. PUBLIC COMMENTS

D. MEMBER COMMENTS

E. NEXT MEETING DATE

F. ADJOURNMENT

ANY PERSON WHO DECIDES TO APPEAL ANY DECISION MADE BY THE **GOLF ADVISORY BOARD** WILL NEED A RECORD OF THE PROCEEDINGS, AND FOR SUCH PURPOSE HE OR SHE MAY NEED TO ENSURE AT HIS OR HER OWN EXPENSE FOR THE TAKING AND PREPARATION OF A VERBATIM RECORD OF ALL TESTIMONY AND EVIDENCE OF THE PROCEEDINGS UPON WHICH THE APPEAL IS TO BE BASED. NOTE: IF YOU ARE A PERSON WITH A DISABILITY WHO NEEDS ANY ACCOMMODATION IN ORDER TO PARTICIPATE IN THIS PROCEEDING, YOU ARE ENTITLED, AT NO COST TO YOU, TO THE PROVISION OF CERTAIN ASSISTANCE. PLEASE CONTACT THE CITY CLERK FOR THE CITY OF PORT ORANGE, 1000 CITY CENTER CIRCLE, PORT ORANGE, FLORIDA 32129, TELEPHONE NUMBER 386-506-5563, WITHIN 2 WORKING DAYS OF YOUR RECEIPT OF THIS NOTICE OR 5 DAYS PRIOR TO THE MEETING DATE; IF YOU ARE HEARING OR VOICE IMPAIRED, CONTACT THE RELAY OPERATOR AT 1-800-955-8771.

GOLF COURSE ADVISORY BOARD
CITY MANAGER'S CONFERENCE ROOM
1000 CITY CENTER CIRCLE
PORT ORANGE, FL
AUGUST 9, 2016

A. CALL TO ORDER

A regular meeting of the Golf Course Advisory Board was called to order by Alan Angelone, Chairman, at 5:02 p.m.

1. Roll Call

Present: Alan Angelone, Chairman/Board Member
 Bob Ford, Councilman/Board Member
 Dennis Flesch, Board Member
 Jane Taylor, Board Member
 John R. Cameron, Jr., Board Member
 Richard Lee, Board Member

Also Present: Bob Duquette, Kemper Sports
 Jason Chennault, Kemper Sports
 Susan Lovallo, Parks & Recreation Director
 Kelly McQuillen, Assistant City Clerk

B. DISCUSSION/ACTION

2. After Hours Course Enforcement

A discussion ensued regarding the decision to table the topic of afterhours enforcement of the golf course to the October 2016 meeting so that Matthew Jones, Deputy City Attorney, can be in attendance to further explain the legalities. It was decided to table the legalese of this topic to the next meeting.

Susan Lovallo, Parks and Recreation Director, had no trespassing signs made. Her staff delivered the signs to the golf course. Six signs state "Registered Golfers Only".

Bob Duquette, Kemper Sports, stated that there is an entry point located at the eleventh tee. He also said that Kemper Sports penned a reference to no trespassing in their newsletter.

Alan Angelone, Chairman, stated that he will write an excerpt for the HOA Newsletter. Dennis Flesch said they should address the issue one more time in the newsletter to gauge its effectiveness. Richard Lee stated that he wanted to keep the neighborhood condition it's in and thinks it shouldn't be mentioned in a HOA newsletter. Member Lee offered to write the excerpt and will share it before it's published.

Chairman Angelone stated that there is a need for a fence or barrier and explained that it's been a problem for a long time. He said when the time is right, he will ask the Golf Advisory Board to make a motion and he will ask City Council for the fence and said something has to be done. Jane Taylor commented that it should be a new partial fence and wondered how much is open, stating that the fence on tee five is gated.

Mr. Duquette introduced the new Golf Course Superintendent, Jason Chennault. John Cameron, Jr. asked Mr. Chennault to share his first impression of the golf course. Mr. Chennault stated that his initial impression was that there was a high concentration of weeds, especially on the eleventh tee. He stated that a consistent fertilizing program must happen. He asked about funding, stating that adequate funding must be provided in order for him to do his job. Discussion ensued and the consensus was that tee one looks great, then when golfers move to the other tees, the look is inconsistent. It was also mentioned that the left side of the thirteenth tee has broken tree limbs. Ms. Lovallo asked if it was on private property. Mr. Duquette stated that it was on the golf course property. Mr. Duquette explained that the summer budget is running out, but he was sure that it will be addressed when the new budget begins.

3. Approval of Minutes

Motion made by Member Lee, seconded by Member Flesch to approve the minutes, correcting the word employees to owners in reference to Tom Smith and Jim Brittain at the Tavern. Motion carried by unanimous voice vote.

4. Kemper Sports Reports

Bob Ford, Councilman, stated that the City Manager is committed to develop one single financial report for the Golf Course. He said that City Council is committed to making the City look nice. Councilman Ford explained that the budgetary impacts aren't a result of course maintenance, such as fertilizer, etc.; but are rather due to hiring.

Member Taylor asked if it was possible to put together a consortium of local municipal courses. She mentioned the idea of bulk buying. Ms. Lovallo stated that they do that when they can and said it was a great idea.

Chairman Angelone stated that there is an ongoing problem with people abusing the course. He asked if they have done anything to affect a culture change. Mr. Duquette said that he met with Mr. Chennault to discuss the issue and they proposed roping off areas, having cart signs and maybe rope across the lines. Chairman Angelone encouraged Mr. Duquette to make sure his staff is more aggressive when people violate rules. Mr. Duquette stated that he has to start from the inside of the organization; mentioning he needs extra staffing and a permanent ranger on staff.

Member Lee said that when he played on a course in Chicago, Illinois the rangers would monitor golfers and hand out tickets for violations. Ms. Lovallo suggested that the Advisory

Board create a code of conduct and present it to City Council for their blessing. Chairman Angelone stated that there is a need to affect cultural change and believes there should be a ranger on the course. Discussion ensued about making it fashionable to set perimeters to ensure golfers know and respect the rules and the code of conduct.

5. Review of Ordinance 2016-4

Chairman Angelone stated that he asked for this to be placed on the agenda because he wanted to take a closer look at *Sec. 50-107. – Purpose, duties and functions*; specifically (b) the Golf Course Advisory Board making recommendations to City Council. He wanted clarification concerning the Sunshine Law and how it pertains to Board Members speaking with Councilman Ford about recommendations and concerns. Member Taylor stated that it circumvents the purpose of the Advisory Board if members are to have one-on-one conversations with Councilman Ford. Ms. Lovallo stated that when the Advisory Board has suggestions, the Advisory Board Chairman or representative is to advise City Council. She used an example as someone having a suggestion, then they can either take care of it at the meetings or if it's something like the Kemper Sports budget, take it to City Council providing the information from a citizen's aspect explaining that this is why the Advisory Board was formed. Member Flesch stated that the consensus of a topic has to be taken from the Advisory Board. Ms. Lovallo stated that City Council's role is not to direct Councilman Ford, adding that recommendations still come through staff. Chairman Angelone said that he wants to understand the process. Discussion ensued and it was explained that Chairman Angelone will share Golf Course Advisory Board reports to City Council and City Council reports to the City Manager.

6. Future Marketing Plan

Member Flesch asked about advertising on the water bills. Ms. Lovallo will look into this. Member Flesch mentioned that the suggestion box at the golf course was empty. Chairman Angelone suggested placing paper and pencils by the box. Mr. Duquette will look into getting that done.

Ms. Lovallo stated that they changed the sign on Airport Road. It now has a green background with white lettering.

C. PUBLIC COMMENTS

None

D. MEMBER COMMENTS

Member Flesch asked about having volunteers on the golf course stating that it would help greatly. Mr. Duquette stated that it may be a liability problem. Ms. Lovallo said she will bring something to the next meeting about the City's Volunteer Program. Member Taylor suggested speaking with Mr. Jones about the program.

Chairman Angelone said that he will ask Chief Grimaldi, Chief of Police, to represent the Port Orange Police Department in honor of Port Orange Police Day on August 25, 2016.

Member Flesch asked about fences on Williamson Blvd. and also along Airport Road, stating that there are a lot of kids near tees three and five. Ms. Lovallo stated that it will be a budget issue.

E. ADJOURNMENT: 6:38 pm

Alan Angelone, Chairman

How Does Your Practice Facility Stack Up?

Practice is popular and practice areas are essential

BY DAVID OATIS AND TODD LOWE



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.

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



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



Some golfers like to scatter their divots. This causes more damage because each swing produces a full divot.

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

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.



Netted facilities can provide an excellent practice experience at golf courses where there is not enough room for a full-sized driving range. When the ceiling net is angled upward, golfers can watch the trajectory of their ball flight.

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.



Ball-retrieval equipment can damage turf, so be sure to consider traffic patterns when designing your driving range.

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

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 under-sized 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.



Artificial turf gives golfers a place to practice while grass



Canopies protect golfers from the elements and can be used in combination with artificial turf.

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

Brewer, William S. 1982. [Practice Ranges — Are They Neglected?](#) *USGA Green Section Record*. January/February. 20(1):11-13. TGIF#19579

Foy, John H.; Beljan, Jan. 1994. [Turf Management in a Battle Zone: Practice Ranges](#). *USGA Green Section Record*. November/December. 32(6):1-6. TGIF#31012

Graffis, Herb. 1981. [Golf Neglects the Idea That Made it Big](#). *USGA Green Section Record*. September/October. 19(5):6-7. TGIF#19577

Kuypers, David. 2012. [Practice Makes Sustainable: Investing in practice facilities benefits the golfer and the business](#). *USGA Green Section Record*. December. 50(26):1-3. TGIF#213851

McClellan, Ty. 2012. [Practice Like A Pro](#). *USGA Green Section Record*. June. 50(12):1-3. TGIF#205436

Metcalf, Maynard M. 1926. [The Most Prevalent Defect in American Golf Courses](#). *The Bulletin of the United States Golf Association Green Section*. December. 6(12):259. TGIF#50367

Vermeulen, Paul. 2002. [Tailor-Made: New equations to determine proper tee size](#). *USGA Green Section Record*. March/April. 40(2):1-6. TGIF#79160

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Practice Like A Pro

Two simple adjustments to the way you practice will result in less wear and faster recovery of range tees.

BY TY McCLELLAN



Today's golfer loves to practice, but certain practice habits on the range tee can result in more wear to the turf than others.

Most of us will never play like a professional, but that should not stop us from practicing like one. Attend a professional golf event and you will notice a unique, linear pattern of divots on the practice tee. This article will teach you how to make two simple adjustments to your practice routine that will give you something in common with your favorite touring professional and produce a better conditioned practice range tee all season long for you and the rest of the golfing community to enjoy.

For practice range tees established with cool-season turfgrasses, such as creeping bentgrass or Kentucky bluegrass, late July and early August usually mark the time when golfers complain about excessive divots. Heavy play combined with stressful midsummer conditions leaves little opportunity for seedling establishment or regenerative growth of surrounding turf into divots. For bermudagrass, zoysiagrass, or any other warm-season species, insufficient turf coverage generally becomes most apparent in

late spring or early summer just as the turf is breaking winter dormancy following months of practice range use. In either case, divots are removed faster than the turf can recover. Oftentimes, poor turf coverage on a practice tee indicates that it is simply undersized for the amount of play received, i.e., there is not enough time for turf recovery before tee stations are returned to previous locations. It also indicates the schedule for station rotations needs to be reviewed for efficiency and that synthetic turf options



(Left) Concentrating divots in one area is arguably the worst practice method because it creates large voids requiring the most time for turf recovery. (Right) Scattering divots is a popular practice habit that is frequently taught because it does not create large voids in the turf that are slow to recover, but it removes the most turf in total because a full divot is taken with every shot.

should be considered at the rear of the tee to provide the additional time needed for turf recovery.

With the exception of an efficient tee station rotation, enlarging the tee(s) and adding synthetic turf are improvements typically left for the off-season, when time and funds become available. So, until then, what can be done? The

solution resides with golfers. Since randomly scattering divots can quickly destroy a practice range tee, and concentrating divots into one area creates large voids in the turf that cannot readily recover, the best approach is to shrink one's divots by removing them in a pattern just like the professionals.

STEP 1

Practice in a linear pattern by placing each new shot directly behind the previous divot.

In a typical practice tee station setup, the linear divot method can easily be repeated for up to 15 shots or more, resulting in much less turf being removed with each successive swing. Let's take a look at a practical example that was provided by Chris Pekarek, golf course superintendent at The Village Links of Glen Ellyn, Illinois. Mr. Pekarek estimates more than 2 million shots are taken annually from the 1.25-acre Kentucky bluegrass practice tee and that 1.5 million of the shots result in turf removal. While divots come in all sizes, the average iron shot is believed to remove a divot approximately 3 inches wide by 6.5 inches long, for a total of 19.5 square inches. After just 30 shots, i.e., a small bucket of balls at most golf facilities, approximately 4.1 square feet of turf are removed, given a typical practice routine ($30 \text{ shots} \times 19.5 \text{ in}^2 = 585 \text{ in}^2 / 144 \text{ in}^2 = 4.1 \text{ ft}^2$). Therefore, after an entire season, 205,000 square feet of divots are removed from the tee. That is more than 4.6 acres of turf from the 1.25-acre surface.



STEP 1 (left) – Practice in a linear pattern by placing each new shot directly behind the previous divot. STEP 2 (right) — Leave a strip of live turf at least 4 inches wide between each line of divots. This keeps divots narrow so that lateral growth of turfgrass from both sides of the divot will lead to rapid recovery, and it also protects seedlings from desiccation and mower injury.

To maximize the use of the grass on the driving range tee, please place your ball at the grassy back edge of your previous divot, removing just a small portion of grass with each swing.



Communicate the message. Visual aids, such as this sign at Stone Creek Golf Club in Oregon, can be placed on the practice tee for all players to see.

If instead each shot is played directly behind the previous divot, subsequent divots are reduced to an average size of 3 inches wide by 2 inches long, or 6 square inches. After 30 shots, this pattern only removes 1.4 square feet of turf. (As the first divot removes 19.5 square inches and the subsequent 14 divots or more remove just 6 square inches each, for a total of 84 square inches, a total of 103.5 square inches is removed for every 15 shots, which is typical for this linear pattern. For 30 shots, or a small bucket of balls, $2 \text{ linear divot strips} \times 103.5 = 207 \text{ in}^2 / 144 \text{ in}^2 = 1.4 \text{ ft}^2$ are removed.) If everyone adopted this method, the annual divots removed would be reduced from 205,000 square feet to just 70,000

square feet. That is a 65% reduction in the amount of turf removed.

Now that we have identified the linear pattern as the best practice method that results in the least amount of turf loss from divot removal, the next step is to ensure rapid turf recovery.

STEP 2

Leave a strip of turf between each line of divots.

For the best results, at least four inches of live turf should be left between the linear divots, or just more than the width of the iron being used. The remaining strips of turf are of great importance because they serve two critical purposes in expediting the healing process.

Lateral growth of surrounding vegetation — Lateral growth from surrounding turf can provide rapid divot recovery when new growth only needs to creep in an inch or two from each side of the void. This spreading process takes much longer when large areas of turf are removed and the diameter of the divot pattern is closer to a foot or more. This is especially true for turfgrasses that rely on recovery from stolons (laterally growing above-ground stems), such as creeping bentgrass; rhizomes (laterally growing underground stems), such as Kentucky bluegrass; or both rhizomes and stolons, such as zoysiagrass and bermudagrass.

Seedling protection — For turf that relies partially on seeding for recovery, such as creeping bentgrass, or completely, such as perennial ryegrass, several inches of remaining turf between linear divots help protect seedlings from wind desiccation and mower damage.

So, whether or not you play like a pro, you can certainly practice like one. The linear divot method is recommended because it minimizes turf loss, and leaving a strip of turf between linear divots leads to faster turf recovery. Implementing this simple divot pattern into your practice regime works for all turfgrass species and will have significant season-long benefits at your facility.

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