

acceding to customer preferences – members in the case of private clubs, patrons at resorts and other public facilities. Striking a harmonious balance is impossible without some sort of remedial action.

Instead, many club managers and green committee chairmen reluctantly – and erroneously — conclude that the best solution is just to tolerate a few bad greens. In rare instances this may be true; in many more situations, however, this conclusion is based on misperceptions concerning what fixing the contour-versus-speed problem would entail. These misperceptions include:

- the construction will cause significant disruption in play
- remodeled greens will differ from unaltered ones in their receptivity to approach shots
- putting speeds will be substantially different on the “new” greens in comparison to the old ones
- greens that have been remodeled will require extensive new maintenance practices
- the original architect’s design intent

will be lost in the remodeling

- remodeled greens will look incongruous in relation to existing ones

Though these apprehensions sound logical and may have a grain of truth, my view is that they range from exaggerated to downright false. In short, a well-conceived remodeling project is virtually certain to be the superior answer.

For starters, the correct redesign and construction method will complete the green remodeling process in 10 days or less, while the grow-in time needed for the sod to re-root and “take” may be as little as 7 to 10 days. True, a temporary green must be used during this interval, but it’s much shorter than most people anticipate and well worth the trade-off.

It’s All Underground

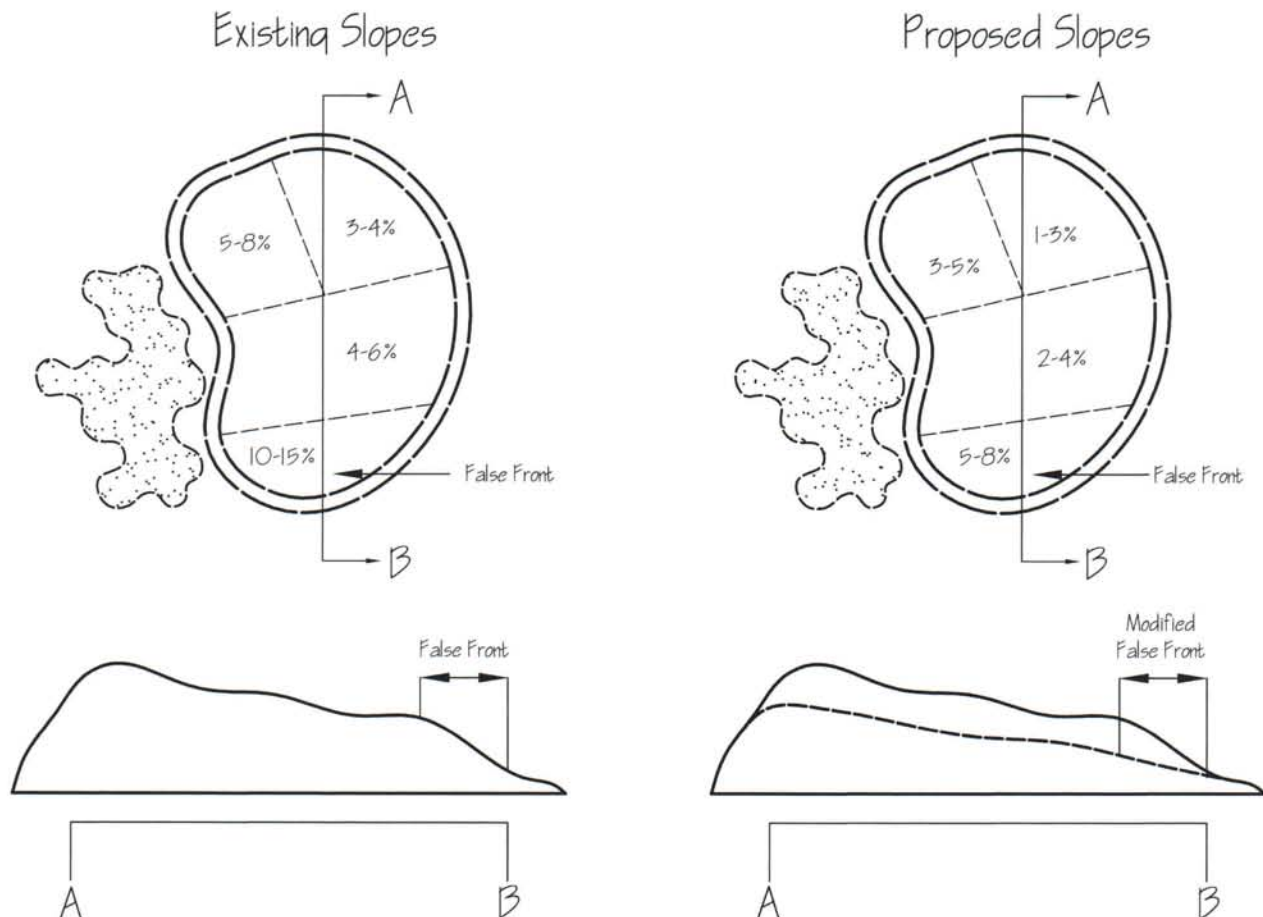
What’s more, a discerning design and construction strategy will, in due time, ensure not only that the remodeled green receives incoming shots and putts like the other greens on the course, but also now has con-

tours in synchronicity with the desired green speed. One such successful strategy is to use the course’s existing topdressing and greensmix in the new “tested” greensmix that will perform to USGA Green Section Specifications. The use of a USGA-approved soils testing laboratory, as we strongly encourage our clients to do, guarantees adherence to these specifications.

This approach contrasts with that advocated by many design and agronomic consultants today. They recommend either using a course’s existing topdressing and greensmix or completely replacing the greensmix with new materials prepared off-site.

I would like to add a third option. Reusing the former greensmix, which in many cases is just old topsoil ‘push – up’ greens, may result in a hard, compacted green surface in the remodeled green if the old mix or topsoil contained a significant amount of fine particles, typically clay, silt, or very fine sand. The resulting question I frequently hear is: “My old ‘push-

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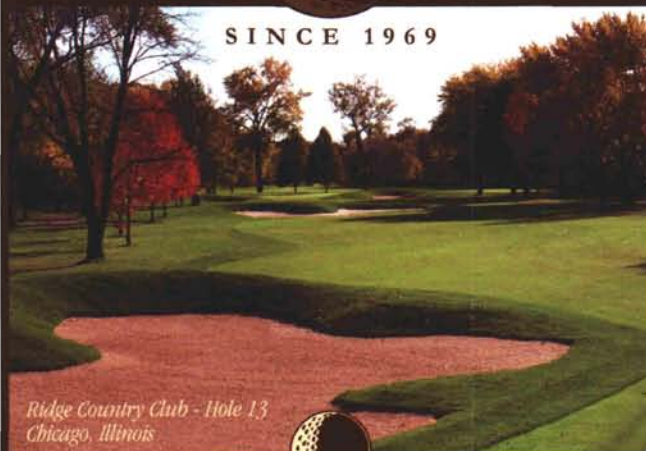
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up' greens worked before in terms of drainage and how they held a shot, why wouldn't they work again?"

My response is that the older greens commonly developed small soil fractures and fissures over time, which in turn helped minimize compaction and allowed proper infiltration and percolation to occur. This would be lost over the first several years after remodeling in the remodeled greens, as the replacement of the existing mix would compact to a higher degree. It will take time and some significant aeration and aggressive topdressing practices to reduce this compaction and regain the deep soil fractures and fissures that were once present. If you can put up with the compaction for the first several years after the remodeling, while educating members or public players, then this is a viable option.

Another proposed solution I regularly hear — just replace the old greensmix with new USGA approved greensmix. This option leads to remodeled greens that receive incoming shots and putt much differently

from the layout's unaltered greens. This tack may also require dramatically different maintenance practices than original unaltered greens. I often tell superintendents to avoid this option unless they commit to a long term remodeling program which entails new USGA greensmix being incorporated into all the remaining greens over no less than a three-year time frame. If you can put up with greens that vary in how they putt and receive incoming shots for approximately three years after the initial remodeling begins, while educating members or public players, then this is a viable option. I am sad to report that many superintendents find, during this three-year period, that players complain significantly about the difference in the new green's playability compared to the old, unaltered greens.

Many companies utilize both methods described above but few use a hybrid of the two. We also believe in off-site mixing using new greensmix but also using a portion of the existing greensmix in this new greens-

This option leads to remodeled greens that receive incoming shots and putt much differently from the layout's unaltered greens.

mix being prepared. The new greensmix must meet USGA Green Section Specifications, in terms of overall testing requirements, based on testing at an approved soils testing laboratory. Accordingly, the newly remodeled green(s) may not receive shots and may not putt in exactly the same manner as other, unaltered greens. But they will much more closely approximate the receptivity and

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putting characteristics than would be the case using the first two strategies. Our experience confirms that the nominal expense and effort required to implement this hybridized method pays off in enhancing the golf experience. The problem with this method is that it will work only when remodeling portions of a few greens. You will need a source to start with, i.e., a portion of a practice putting green or nursery green from which to borrow old greensmix. It will be gathered and transported off-site to the company doing the mixing.

We also suggest recycling sod from the existing green and collar, where possible, to promote continuity between the old green and the remodeled edition. In cases where the remodeled green is larger than the former existing green, we advocate using sod from the collar for the green's expansion, then gradually bringing the height of this sod down, over time, to the green's mowing height. We recommend using this collar-height sod in the back of the green while using the existing green sod from the back of the green in the remodeled area. This method minimizes player disturbance as most players are short, left, or right in their approaches to a green rather than long. Sod for the collar can then come from existing turf at the beginning of the fairway. That sod is brought down in mowing height in increments until it matches the height of the existing unaltered collar grass.

Naturally, special attention to maintenance issues is required at the outset to nurture newly planted or transplanted turf. Nonetheless, a

comprehensive approach to the remodeling process will produce remodeled greens that soon blend – both esthetically and in terms of the maintenance they demand – with the course's other green complexes.

The question of adulterating or compromising the original architect's design intent is always more problematic than purely agronomic issues. A perfectly legitimate concern, it inevitably leads to other questions: How important is this to the membership or the regular patrons of the course? Does the original designer enjoy a reputation that, in its own right, makes his work worth preserving? Can his perceived design intent be reconciled with the game's modern-day evolution and the course's overall goals?

Creating Cupping Areas

An object lesson comes from an anonymous private club in the eastern U.S. and helps elucidate the delicate balance for which to strive. Designed by the legendary Willie Park, its heritage is beyond dispute. Still, with 27,000 rounds per year, the superintendent was struggling to maintain healthy turf, particularly on a par 3 green where 70 percent of the 5,000-square-foot putting surface had grades of four to eight percent, sometimes more, while the remaining 30 percent had more comfortable contours of one to four percent. Similar proportions existed on four other greens and, as the superintendent was required to maintain putting speeds of 11 to 12, these were places where any three-putt was deemed a good effort.

Does the original designer enjoy a reputation that, in its own right, makes his work worth preserving?

The superintendent reasoned that a putting surface with at least 4,500 square feet of additional surface in the one-to-four-percent-slope range would present a much more reasonable and fair test of golf, not to mention maintenance. The membership's concern was that Park's "false front" of five-plus percent – a trademark element in his original designs and the overall challenge of the green — would be lost in the redesign.

My company's redesign included an increase to 5,800 square feet in overall green surface — an additional 800 square feet, in other words. The new surface area maintained a gentler but still visually apparent and challenging "false front" on a four-to-seven-percent grade, while 4,500 square feet of the green now exhibits an interesting variety of one-to-four-percent contours with modified, but still preserved, challenge in the three-to-four percent range. The superintendent gained 3,000 square feet of new "cupping" area to more evenly distribute play and related wear

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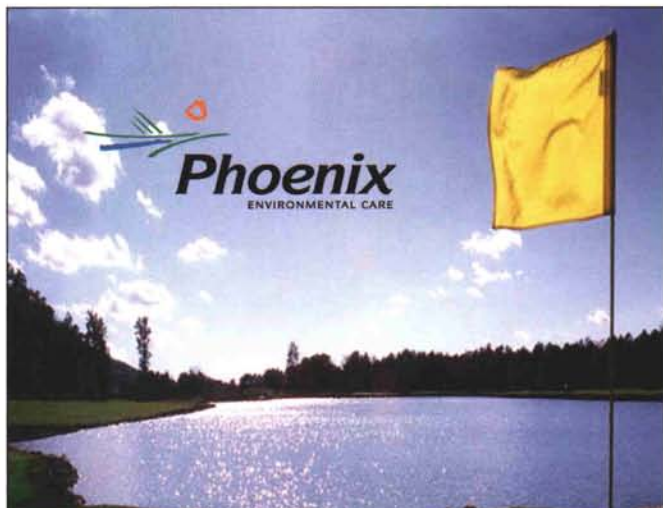
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and tear. For their part, the membership was happy to see the additional one-to-four-percent cupping areas of the remodeled green while the “false front” to the green and the overall challenge was still preserved.

Granted, from a purely mathematical standpoint 6,500 square feet might have made more sense given the 27,000-round volume on the course. However, Park's greens, appropriate to their era, are generally small. The 6,500 square feet would have constituted the proverbial “sore thumb.” Putting surfaces on the course's other par 3s average 5,000 square feet – an area for which the superintendent was able to maintain top-quality conditioning of the bent/poa greens.

New and the Old

“Will the remodeled green look out of place?” This an excellent question, one that goes to the heart of the golf course architect's design philosophy, appreciation of the game's history and traditions, and critical judgment. For every sensitive interpretation of an original

designer's concepts, there is, regrettably, an atrocity – the equivalent of a red crayon stripe across a classical canvas, often made in the name of “progress” but conspicuous in its affront to context. Thus choosing a golf course architect with significant classical design restoration experience is a must. This maximizes the potential to blend the classical look of the restored, renovated, or remodeled green in harmony with the existing classical green complexes that remain unaltered.

On the opposite side of the ledger is blind obeisance to the original architect's drawings and exact specifications, some of which may be impossible or undesirable to preserve. Classical design elements are generally worth maintaining, but in a few cases existing green design is of poor quality and does not possess any attributes that warrant restoring. Golden Age golf course architects had bad days, too, after all.

Fortunately, modern design software, with its three-dimensional display capabilities, allows architects and

clients alike to make informed choices about putting speeds, contours, what to keep, and what to tweak.

In closing, don't hold on to greens that don't “work” with your current putting speeds. Creative and carefully conceived redesign, coupled with a prudent and timely construction method, will yield the desired results with minimal disruption to play and with the lowest-possible cost and emotional travail.

You may prefer the 100-year-old house, but that doesn't mean you will be foregoing central heat and air conditioning. Faster putting speeds have generally added intrigue to the already intricate game of golf, and, unfortunately, this seems unlikely to change any time soon. Neither will our devotion to the game's history. A reasonable synthesis of the two is achievable as long as we watch our slopes and speeds.



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There are two schools of thought on how to communicate with your crew. One is to select and use words the crew can recognize and relate to; the other is to use only proper Spanish found in a translation dictionary. Therein lies the rub. Most companies use strange and bizarre words that may be in the dictionary but have little or no connection to the thing they are trying to describe. Don't believe me, take a look at your equipment manuals, instructions and labels that offer a Spanish translation.

One company calls it a boquilla (boh-kee-yah). That word means blowtorch tip, cigarette holder, or the mouthpiece of a musical instrument.

I'm not going to name names or point fingers at any one translator, there aren't enough fingers. Did you ever wonder why your staff has given you a puzzled look when you try and describe an item in their native tongue? Some of the following have been used in the golf industry to describe specialized items. It is important to understand that some words are not translatable, meaning there is **no** equivalent in Spanish. A shortlist of such key words are: reel, bed-bar, (rotary) mower deck, and my favorite, - spray nozzle.

The word "reel" for some reason seems to get everyone's creative juices flowing in the industry. Here's some of the stuff currently being used to describe this one part of the mower:

- Rodillo (roh-dee-yoh) – it means roller, like the ones on the cutting units
- Navaja (nah-vah-hah) – it means penknife or jackknife
- Cuchilla (koo-chee-yah) – means blade
- Carrete (kah-rray-tay) – it can mean hose reel, spool of thread, tape reel, a roll of film, or a fishing reel
- Molinete (moh-lee-nay-tay) – it can be a windmill, pinwheel, exhaust fan, or turnstile
- Rodete (roh-day-tay) – a wheel, hair bun, or pincushion pad
- Tambor (tahm-boor) – means drum; the 55-gallon type as well as the musical instrument.

Talk about having your Spanish following the beat of a different drum...

For "bedbar," literal translation would be something like a "bar from a bed," which won't work, but that hasn't stopped people from trying. The most common two ways used are:

barra de cuchilla (**bah**-rrah day koo-chee-yah), which is "blade bar;"

barra de base (**bah**-rah day **bah**-say), which is "base bar."

"Spray nozzle" is a classic. One company calls it a boquilla (boh-kee-yah). That word means blowtorch tip, cigarette holder, or the mouthpiece of a musical instrument. Many companies have taken a fancy to this word as well. Go to your local hardware store, visit the Lawn & Garden department, and check out the nozzles for a garden hose. There, on the packaging in Spanish, is "boquilla." I wonder if they employ the same translator? The governor on an engine is a regulador (ray-goo-lah-dohr), but someone followed the saying, "if it looks like it, and sounds like it, it must be..." so they call it a gobernador (goh-behr-nah-dohr) which really is a governor, a person in charge of a State or Province, not an engine part. One company calls their grinder a rectificadora (rehk-tee-fee-kah-doh-rah), which is an electrical rectifier. I guess they're starting a new product line.

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The sprayer we use on a golf course is a rociador (roh-see-yah-dohr); someone else calls it a pulverizador. That word is used to describe a perfume atomizer, a spray paint gun, or a carburetor jet. The blade on a reel itself is cuchilla de reel; some call it an hoja (oh-hah) which is used mostly to describe a leaf on a tree or a sheet of paper.

Two words being used to describe things on a sprayer are "sosporte" for valve bank and "aguilon" for boom. I can't find those words anywhere in Spanish. If you can, let me know.

I know it looks hopeless but progress is slowly being made. One company has hired a native of Mexico to run their Spanish training department. Another company is modifying its European Spanish manuals to the Mexican dialect. The ideal situation would be for all those responsible for the Spanish publications in their respective companies to get together and agree on what words will be used in the industry. Maybe they don't realize it

but one can insist that words in a document remain the same during translation. Until that time comes, we can call a reel something different every day of the week or just call it a reel...

Personally, I feel you should use whatever words work to describe a thing or action, however, make sure you let your staff know what you expect. Of course, be consistent.



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