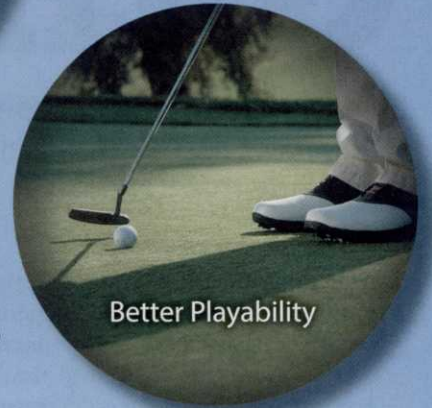


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# Back to the GRIND

In exclusive research, superintendents and equipment techs offer their insights on reel and blade maintenance.

**W**hile quality of cut is the primary motivator for reel and blade maintenance, superintendents and equipment technicians seem to subscribe to a philosophy that is more gut instinct than regimented planning.

For example, three quarters (75 percent) of turfheads and equipment technicians asked told GCI they grind “whenever it needs it,” and not based on a set number of hours (3 percent), days in operation (2 percent) or weeks of use (3 percent).

When they do the majority spin and relief grind (63 percent), with only 38 percent solely spin grinding. In addition, according to the survey, 68 percent of respondents indicated they lap.

And while nearly everyone you ask has a particular opinion regarding their unique approach to grinding and sharpening, more than three quarters (77 percent) indicated they were open to hearing other opinions and philosophies on the subject.

This is the first of a two-part analysis examining this research. The first provides a wider view of the findings, examining the data as a whole as well as a broader outlook of reel and blade maintenance philosophies.

In the August issue, we’ll dial down on this data, providing a breakdown of some of the key findings based on operating budget, private vs. nonprivate facility, as well as geography.

It’s important to note that GCI, in partnership with Foley United, developed a reel and blade maintenance questionnaire that was distributed to GCI’s readership in the United States via the online survey portal, SurveyMonkey. In addition, GCI editors conducted follow up interviews for insight and views on the following data.

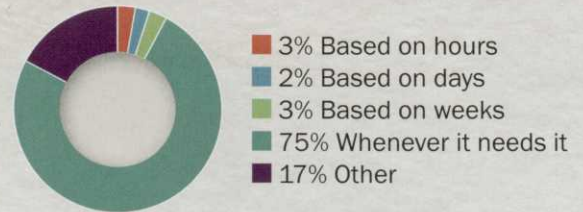
Among those who participated in the research, nearly three quarters (73 percent) were golf course superintendents and 15 percent were equipment technicians. More than half (62 percent) of respondents worked at non-private courses and reported an annual operating budget of less than \$500,000 (48 percent). According to the data, respondents used a variety of brands for reel and bedknife grinding, the majority of which included Foley, Neary, Bernhard, and Peerless (in no particular order). – *The editors*

The following research project examining reel and blade maintenance trends was sponsored by Foley United.



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## How do you determine when to grind?

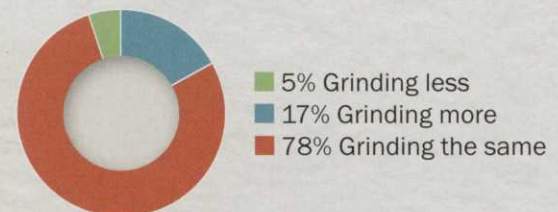


Editor’s note: “Other” responses included end of season, annual, and winter, as well as when the labor is available to perform the task.

## Are you grinding more, the same or less today than you were five years ago?



## Five years from now, do you anticipate grinding more, the same, or less than you are today?



## Grind time

Very few superintendents and technicians follow a regimented schedule to grind their reels. The majority (75 percent) take an educated guess about when it’s time to grind. So what determines this? Many say it’s a noticeable decline in the quality of cut (typically tearing of the grass blade), and/or course conditions (recent topdressing), as well as basing it on regular visual inspections. Nearly a fifth (17 percent) subscribe to an end-of-season or during-winter regimen for grinding and sharpening.

Likewise, respondents didn’t see much of a deviation in the frequency of their reel maintenance activities. For example, more than half (57 percent) said they grind the same amount today as they were five years ago, and more than three quarters (78 percent) believed they’d maintain this same frequency in five years.



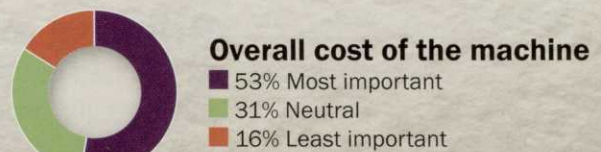
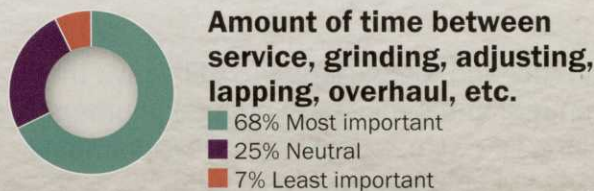
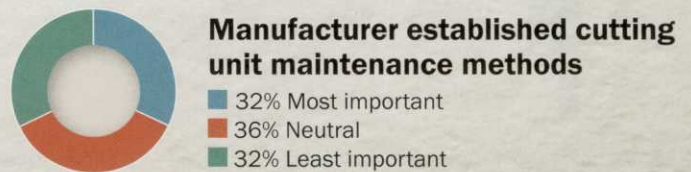
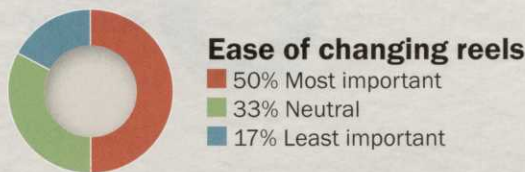
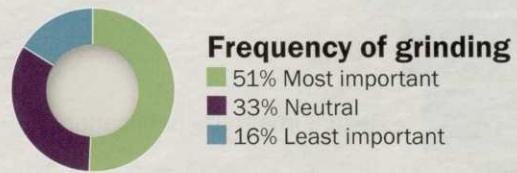
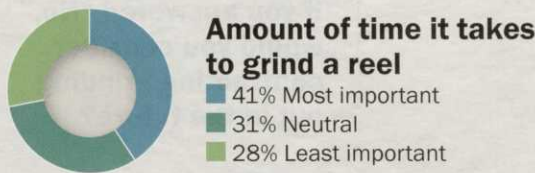
## What really matters

The cut is king, according to survey respondents. Nearly all ranked quality of cut as the most important aspect associated with reel maintenance. Next to quality of cut, importance was placed on frequency of service (time between grinding, adjusting, lapping) and overall cost of the machine.

Superintendents and technicians placed the least amount of importance on manufacturer established cutting unit maintenance methods, which was closely followed by the amount of time it takes to grind a reel.

Regarding reel maintenance, rate the following in order of importance.

SCALE	Most important			Least important	
	1	2	3	4	5
Quality of cut	97%	2%	1%	0%	0%
Amount of time it takes to grind a reel	9%	32%	31%	14%	14%
Ease of changing reels	9%	41%	33%	11%	6%
Amount of time between service, grinding, adjusting, lapping, overhaul, etc.	21%	47%	25%	5%	2%
Cost of replacement parts	20%	28%	36%	11%	5%
Frequency of grinding	16%	35%	33%	11%	5%
Manufacturer established cutting unit maintenance methods	9%	23%	36%	20%	12%
Overall cost of the machine	18%	35%	31%	12%	4%

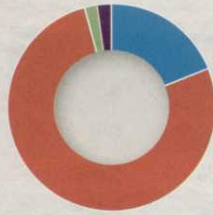




## Philosophies

Surprisingly, superintendents and technicians aren't married to how they maintain their reel cutting units. In fact, more than three quarters says they're open to other options or definitely need to change or update their grinding practices. However, nearly a fifth (19 percent) of respondents have no intentions of changing their routines in the foreseeable future.

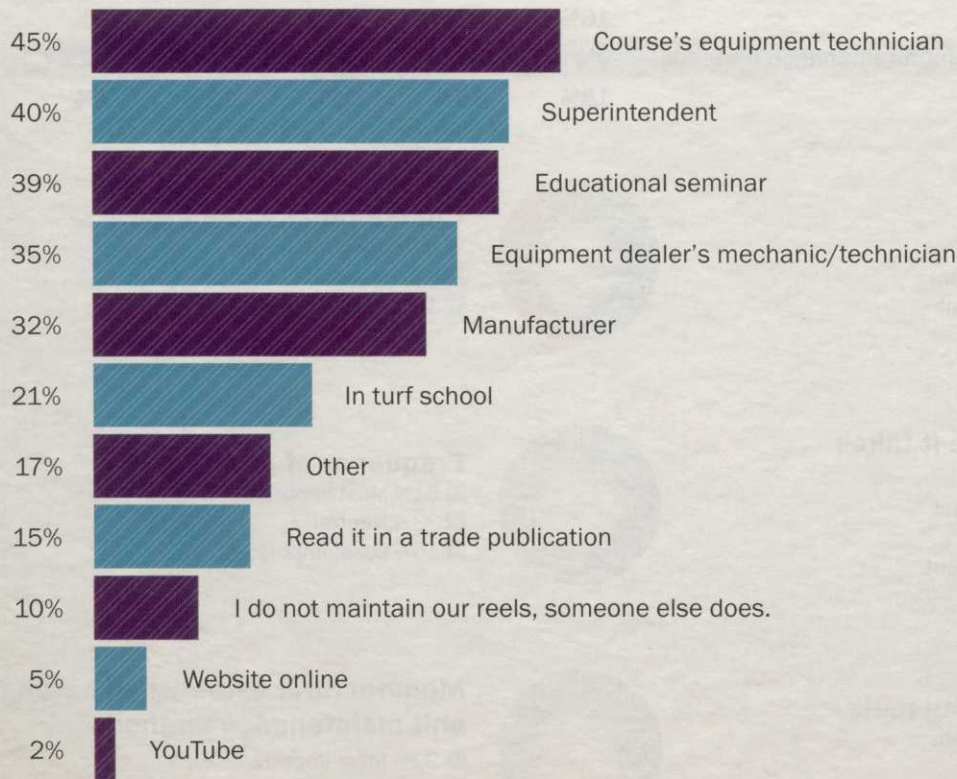
So where did respondents learn these reel maintenance practices? The majority point to on-the-job training, with 45 percent learning from the course's equipment technician and 40 percent from the course superintendent (presumably while they were an up-and-coming assistant). Very few, though, relied on online training resources (websites or YouTube).



### How committed are you to your current grinding practice, regimen or philosophy?

- 2% I don't know
- 2% Definitely need to change my practices
- 19% Would not change
- 77% Open to hearing other opinions

## Who taught you, or where did you learn, how to maintain reel cutting units?



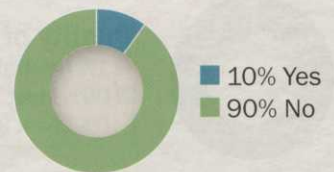
Editor's note: "Other" responses included self-taught, a friend or family member, and trial-and-error.

## Keep it in-house

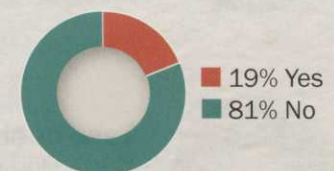
Superintendents and equipment technicians aren't keen on the idea of contracting out their reel maintenance duties. An overwhelming majority of respondents (90 percent) indicated they keep these duties strictly in-house. Likewise, 81 percent said they would not consider contracting this out in the future.

When asked why, respondents primarily cited the cost and waste of facility resources in contracting out reel maintenance duties. In addition, some respondents touted their technicians' and/or mechanics' grinding and sharpening prowess.

### Are you contracting out your grinding needs?



### If you answered "No," would you consider contracting grinding out in the future?



# 48%

## Grinding away

Nearly half of superintendents and technicians (48%) believe the average life expectancy on reel and bedknife grinding equipment is between 10 and 15 years. Likewise, 35% of survey respondents believe this equipment should last more than 15 years.

– GCI/Foley United research





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# Do You...?



**...subscribe to the “no contact/no relief” or “light contact with light relief” grinding philosophy?**

- 22% No contact/no relief philosophy
- 69% Light contact with relief philosophy
- 2% Don't know
- 7% Other



**...spin grind only?**

- 38% Yes
- 62% No



**...spin and relief grind?**

- 63% Yes
- 37% No



**... lap?**

- 68% Yes
- 32% No



**... believe automation of the spin grind process will help reduce labor and increase productivity in the workshop?**

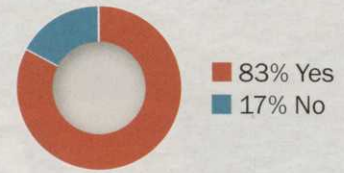
- 73% Yes
- 8% No
- 19% Don't know

## Specs

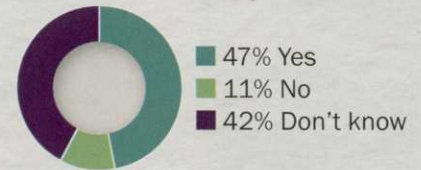
Nearly all of the respondents (83 percent) said they grind new bedknives.

However, the jury is out on whether following the manufacturer's specifications had an impact on maintaining and/or extending reel life in between service.

**Do you grind new bedknives?**



**Do reels stay on/cut longer when maintained to the manufacturer specifications?**



# #1

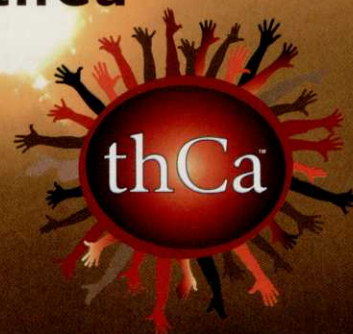
When asked to describe their No. 1 frustration with reel maintenance, the majority of superintendents and technicians cited the time required – including grinding, sharpening, set up and adjustments – to complete the process.



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**Monroe Miller** retired after 36 years as superintendent at Blackhawk CC in Madison, Wis. He is a recipient of the 2004 USGA Green Section Award, the 2009 GCSAA Col. John Morley DSA Award, and is the only superintendent in the Wisconsin Golf Hall of Fame. Reach him at [groots@charter.net](mailto:groots@charter.net).

## THE CASE FOR FACE-TO-FACE

When you're my age, attention has to be paid to the generation gap. Slacking off leads to a slide into isolation and even ignorance. It isn't always easy for my generation who are more at home with paper, print and books than iPhones, iPads and touch screens. But I will also be the first to recognize the importance of change.

Last year we planned our annual Wisconsin Turfgrass Association Winter Turf Conference. We are past the time when we held our meeting in a large hotel for two days, offering a full-blown equipment show, concurrent educational sessions with speakers, and a great social event the first evening. Now we're down to one day, eliminated even tabletop displays for vendors, and offered educational lectures by our own faculty, grad students and maybe one out-of-state speaker. I believe our experience is mirrored across the country.

Our winter conference has always been a dicey proposition, primarily due to snow. The lawn care/landscape guys plow snow and really need the off-season revenue. For others, just getting to the conference is dangerous if the roads are slippery. So this year, for the first time, we offered a simultaneous webinar. The meeting was held at a university auditorium that was equipped to broadcast the conference live. Thirty-two responded to the webinar, about a third of the number who attended in person. We followed up with a survey, and the response was overwhelmingly positive.

Clearly, we'll do it again, with a few changes. It is cheaper (our webinar was only \$20), eliminates travel time, takes out the weather factor, and it can be watched later if work interferes. It is also a concept familiar to younger superintendents.

However, I still prefer the face-to-

face conferences, and probably always will. To me, there's something refreshing about the personal connections made during a conference. I like the interaction that occurs when a group of turfies gather, and they often have a real dollar value to the organization that paid your way to attend. I think I have learned as much from other superintendents at these meetings as I have from the lecturers. There is

I think I have learned as much from other superintendents at these meetings as I have from the lecturers. There is always someone who has **successfully dealt with the same issue** you are now working through and may have some alternatives for you to think about. You cannot do this at a webinar!

always someone who has successfully dealt with the same issue you are now working through and may have some alternatives for you to think about. You cannot do this at a webinar!

It has always been an advantage to learn directly from the presenter – the individual who did the research or developed the practice. Not only can you ask a question after the lecture, you can engage that person eye-to-eye in a conversation during the day. I've done that hundreds of times in my career.

Attendance allows for networking, a contemporary term with real meaning these days. For some, networking is as big a draw as the speaker roster. Networking is a face-to-face activity. I have to add, somewhat selfishly, that I have made some wonderful friendships at conferences throughout my career. It may be an indirect benefit, but it is real nonetheless.

I've heard it can actually be hard to focus during a webinar – phone calls, visitors and employee interruptions disrupt the lecture's flow. The stop/start is distracting. Granted, you can

archive a webinar to watch later, but that is another compromise. Although obvious, you cannot host an equipment show – tabletop or otherwise – at a webinar. That is a limitation.

I'm no Johnny-come-lately to distance learning. Wisconsin kids who attended a rural, one-room school, like I did were students of the University of Wisconsin Extension's "School of the Air." We learned music from the

radio program "Let's Sing," taught by a music professor and broadcast from Madison. Even in the 1950s, face-to-face was important enough that regional gatherings and a state festival on campus were highlights we looked forward to attending – in person.

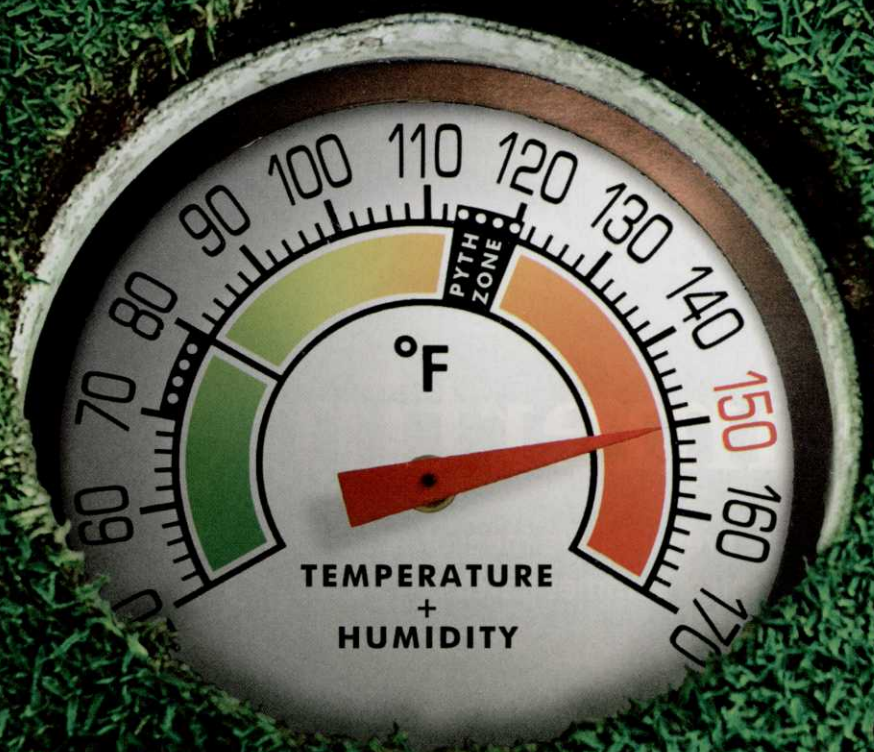
In the final analysis, we're lucky to be able to tailor our educational programs to fit our circumstances, whether from a distance or in person. We get to choose.

**ADDENDUM.** A medical issue prevented me to attend this year's GIS, my first absence in 40 years. What one misses is far more than you'd guess and I hope to attend next year. My successor, Chad Grimm, and his assistant Jacob Schneider, again proved that the cost to attend can be reasonable. They attended from Monday through Friday, and the cost to the club was \$1,164 for registration, airlines, food and housing. They rented a condo with two others and through the use of credit card points and company gift cards. That comes to \$582 per man. **GCI**



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## Key points

- Summer patch prefers hot, wet soils. Weather conditions will exacerbate activity.
- Spring is the best time to begin preventative applications for summer patch.
- Summer patch is found anywhere annual bluegrass or Kentucky bluegrass grows, but is severe on putting greens because the damage is more obvious.
- Good agronomic practices can assist in summer patch damaged turf recovery.
- Once spotted, it is suggested to raise mowing heights and water deeply and infrequently, which encourages root growth.

# Summertime blues

**If your springtime preventative measures failed, there are ways to successfully control summer patch outbreaks.** By Rob Thomas

**T**hough the name implies troubles during warmer weather, summer patch is a disease that is best fought in the spring. If prevention fails and it rears its ugly head, however, there are ways to not end up on the losing side of this battle.

According to Nathaniel Mitkowski, associate professor in the department of Plant Sciences & Entomology at the University of Rhode Island, summer patch is caused by *Magnaporthe poae* and has been observed in the United States since the 1960's, but the pathogen wasn't actually named until 1989 by Peter Landschoot and Noel Jackson at the

University of Rhode Island.

While Mitkowski says summer patch is very difficult to diagnose until it is causing significant harm, Turf Diagnostic's Jennifer McMorrow says the disease is difficult to spot, unfortunately.

"It is difficult to identify summer patch disease visually, but look for yellow, somewhat circular patches with a 'shepherd's crook' bent look at the tip of the leaf tissue," McMorrow says. "Summer patch may eventually coalesce and appear to snake through a green. Summer patch can easily be confused with *Poa annua* that is yellow from poor

environmental conditions or yellowing from growth regulators."

Beware: Once spotted, summer patch is well on its way to destruction.

"If you are diagnosing it in the field from visual symptoms, substantial damage has already been done," Mitkowski warned. "The pathogen attacks plant roots and moves relatively slowly, gaining speed as soil temperatures rise above 65-70 F. Because it is attacking roots, foliar symptoms may not be observed until the plants go into collapse. At this point, the damage is already done.

"Superintendents who have had the dis-