



I CAN'T HEAR YOU

By Monroe S. Miller

I guess some things come with age. You know—bifocals, a few extra pounds around your waist, a receding (or receded) hairline and a little less endurance than you had only a few short years ago.

And the fact is that we all lose some of our hearing as we grow older. Even golf course superintendents. Maybe especially golf course superintendents, as I thought about it yesterday.

Columbia ParCar brought an electric utility car to our golf course to try for a while. It has exactly the same body as our ten gas utility cars have, and you cannot tell this one from any of the others just by looking. That's why it was so startling to use a golf course implement that is absolutely

dead quiet. The silence of this vehicle, as the old saw goes, was deafening.

No wonder. Sometimes the last thing a golf course resembles is a peaceful and quiet sanctuary away from the hustle, bustle and noise of society. Too often mine sounds more like an industrial park.

The worst of it may be in the early morning in the shop yard. There are upwards of twenty of us, all operating an internal combustion engine of some sort. There is the deep, full clatter of big tractor diesels, the shrill scream of backpack blowers, and the vibrating drone of single cylinder engines. Put that all together with the racket from a crowd of young males and music from BIG stereo speakers in the shop, and

the last thing you can imagine is peace and quiet.

And it's 5:30 a.m.!

How long has golf course management been in the age of the internal combustion engine—sixty or seventy years? However long that is, that's how long it has been since those of us working in the field have enjoyed the quiet golf players might enjoy at a late afternoon hour.

It would be foolish to wish for the times when all you heard while mowing fairways was the pleasant singing of a well adjusted reel passing over a sharp bedknife. Or the clickity-click of a horse drawn sickle mower trimming rough areas. It is even silly to wish for
(Continued on page 33)

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(Continued from page 31)

the relative quiet of a Ford 8N drawing a set of Worthington Airfield Blitzers—that job is now relegated to high horsepower, diesel, multiple-deck rotary mowers. Noisy rotary mowers.

The high power-to-weight ratio of engines mean they will be with us for a while. At least as long as the fuel lasts. Less time and less effort were good reasons to have embraced them in the first place and good reasons to keep them yet today.

Sound loudness is measured in decibels, and like the pH scale, it is logarithmic. So a sound of 100 dBs is ten times louder than 90 dBs, and 100 times louder than 80 dBs. For reference, a watch ticks at around 30 dBs and a Remington deer rifle registers sound in the 140-170 dBs range.

Engines that power our golf course equipment fall into the 80 to 110 decibel range. Unfortunately, injury to our ears begins in the 80 to 85 decibel range. Clearly, our hearing is at risk daily unless some precautions are taken.

Times change, and so do attitudes. Twenty years ago, few wanted to wear " earmuffs " to protect their ears. They weren't "cool" and no one wanted to look silly. I was guilty, too, opting to let our big Homelite chainsaw roar away while using it without ear protection. Sometimes the pitch and decibels literally hurt my ears, but still I didn't put anything over them for protection.

These days are saner. We insist on proper protection and get no argument from anyone. We have lots of pairs of earmuffs and we buy the small throw-away ear plugs by the gross. Earmuffs are more effective, offering an equipment operator a noise reduction range of somewhere between 15 and 30 dBs. And you can use them in combination with plugs and achieve another 10 to 15 dB reduction over using either one alone.

When you buy ear protection, you should look for the decibel noise reduction rating (NRR) somewhere on the package. You will be able to judge the quality of what you are buying.

No one could deny that progress is being made in noise reduction. That Homelite chainsaw I mentioned, which years ago Dave nicknamed "McBarker", wouldn't pass muster today. Our new chainsaw, which is even bigger, runs far quieter. Not that it is

silent, but it is greatly improved. And the engines that run our new generation walking greensmowers are so silent that we can mow next to the neighbors' homes and not worry about disturbing them at our early hour of work.

When we demonstrated large area rotaries last fall, we noticed that the one we liked best was also the noisiest one. We mentioned that to the salesman, and he said "why don't you choose the European model? It has extra sound deadening insulation and is noticeably quieter." We did, and it is.

So we know manufacturers are aware of noise and are trying to do something about it. Insulation, reduced sheet metal vibration, improved airflow and new technology mufflers are all helping. My guess is that they are more worried about emissions—changes are necessary there or they won't be able to sell in many states, most noticeably California. There will be some tagalong help, like that electric utility vehicle we tried or the electric greensmowers we saw in Dallas. But once emissions are controlled, maybe the manufacturers will face the gun on noise control and

develop some real solutions.

And then, maybe, we'll have that peace and quiet on our golf courses we all want. The American Medical Association has reported that ten million Americans have suffered noise-induced hearing loss. Another twenty million among us are regularly exposed to noise that is loud enough to damage our hearing. No doubt we are found in both groups. Fortunately, golf course attitudes now allow us to wear hearing protection. Arnold Palmer has made it acceptable to wear a hearing aid, confessing that he hasn't heard a lot of things for a lot of years. He may inspire others to do the same.

Imagine how it will be, at an early hour, hearing the birds singing while cutting fairways. Or how sweet it will be listening to the wind through pine and aspen while doing business with a greensmower. Once again, golf courses will distinguish themselves for their quiet.

I can hardly wait for that day. Maybe then my daughter Holly will stop sending me information on the "Miracle Ear"! 🙏



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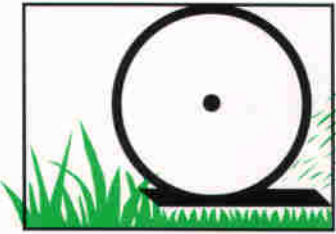
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GENTURY RAIN AID



RESHAPING FAIRWAYS

By Todd Clark and Monroe S. Miller

I. DESIGN

By Todd Clark

Today, many vintage golf courses are searching for alternative solutions for modernizing and improving their course without jeopardizing the existing character or style. One solution that can enhance the appearance, playability and condition of the course without a complete renovation is to reshape the fairways.

From a design standpoint, the fairway is the only element that can be used to connect the critical components of a hole. These components include roughs, mounds, trees, sand bunkers, water and greens, as they define the layout and strategy of each hole. A contoured fairway shape will help to define the landing areas as it expands and contracts around each component. This in and out movement will tell a golfer where the premium ball positions are located and how to approach the hole to fit their style of play. The fairway shape alone can be a simple defensive element as it narrows at the end of landing areas for definition and difficulty.

Due to the improvement of modern mowing equipment, these contour mowing patterns can be maintained as the fairway widens and narrows, a task more difficult with tractors and gang mowers. Reshaping also creates an extremely attractive contrast between the fairway grasses and the rough grasses. Advances in plant controls give course managers the necessary tools to maintain the species integrity of each area of the reshaping.

Fairway reshaping provides an opportunity to improve the appearance and condition of a golf course at a reasonable cost. For the golf players, the contrast of grasses and the shaping itself make the golf course more interesting, more challenging and more aesthetically pleasing to play.

The accompanying sketches of before and after illustrate the principles of fairway reshaping.

II. EXECUTION

By Monroe S. Miller

One of the best, most practical and useful lectures I've listened to at our Wisconsin Golf Turf Symposium was given by Kevin Dushane a number of years ago. Through words and slides he described how he was redefining the fairways at Bloomfield Hills CC. The method he described involved the use of a non-selective herbicide on the primary rough adjacent to fairways and a follow up reseeding plan. It worked beautifully for Kevin.

I followed up with him on specifics and tried the same method on our golf course. Only one side of a fairway was attempted. Good thing, too. The results were marginal for me.

There were no problems with the *Roundup* applications, the close mowing and clipping removal, the double aerification of the seeding itself. The problem, simply stated, was keeping people out of the work area. Even the most successful of golf players loathe leaving a ball in a GUR area

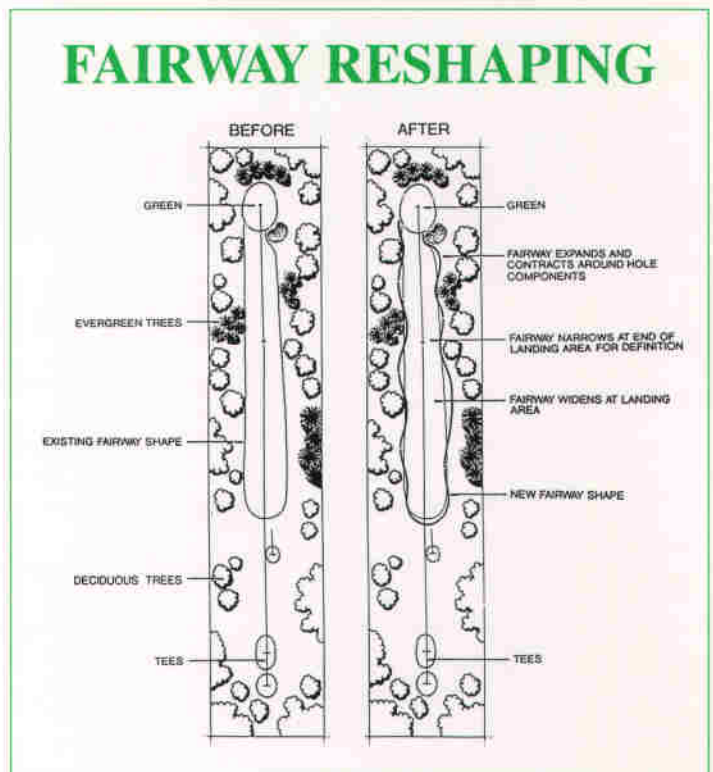
and will tromp through the mud to retrieve it. Others don't like detours. We used hundreds of stakes, thousands of feet of rope and untold signs. On ONE side of ONE fairway. Any attempt at a wholesale effort using this technique would have been foolish.

We needed to find a better way to get to the same end. Obviously, there aren't many choices—it's either seed or sod.

So we decided to use sod to reshape and contour our fairways. It has worked out very well. Each year part of our summer work is to reshape two or three fairways. Our green committee determines the annual choices and I budget accordingly.

The shaping isn't done haphazardly or without reason. We employ our golf course architect—Dick Nugent Associates—to do the contour design. Todd Clark, a designer in the Nugent office, has done the actual design for several years now. We receive a blueprint plan, but also have Todd travel to Madison to do the "field fitting" and actual staking. He was kind enough to co-author this piece with me. The example he shows is our fourth fairway, before and after.

Final approval is given by the green committee chairman or a person he designates. We've found the best way to handle this part of the process is to lay out the actual contour lines with one-inch hose. Fortunately, we have





BEFORE — notice the nice straight edges!

thousands of feet of it, and all of it is needed. This takes any guess work out of the chairman's job and allows him to make any adjustments with ease. It also provides a smooth guide for the painting we do for the actual sod cutting.

We remove at least 16 feet on the entire perimeter of the golf hole and around the green. Often as many as 30 feet of the tangled mix of grasses are cut, rolled and hauled off the golf course.

From here to completion is the back-breaking part of the job. It is strictly low technology. The sod is cut, rolled, loaded into trucksters or into a frontend loader. Where con-



Getting ready for loading and removal.



Cutting requires a good operator and a sharp knife.

venient exit exists, we use a one-ton truck. The sod we remove is composted for a year or two and becomes a beautiful, rich soil for finish work around the golf course.

The skinned area is fertilized with starter fertilizer and cultivated with a Gill pulverizer. Then it is ready for sod.

Lots of sod. The simple arithmetic you do to determine the amount to order is scary at first. Now we place orders for semi-loads, not square yards or even pallets! Our entire staff works at it, split into hauling and laying crews. It goes more quickly than you would think.

Best for us has been to strip one-half of a fairway on day one and prepare it for sod; sod that half the next day. Day three is a repeat of day one, and day four is like day two. In one week a golf hole is transformed from looking like the airport runway fairway for forty (or more) years ago to the contemporary and more sporting look of the 1990s.

Todd presented the architect's perspective on reshaping. There are others. The color contrast between the new



Just getting started with the cutting and rolling and loading.

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Kentucky bluegrass cultivars and *Poa annua*/bentgrass is nearly spectacular. It is what most caught my eye on Kevin Dushane's slides at the Symposium. The definition of features—fairway, green and bunkers—is a delight. Playability is greatly improved because golfers no longer have to try to hit from one inch high *Poa annua*/bentgrass that was adjacent to the fairway; that slightly errant shot can now be more fairly played. And a grass area that was difficult to maintain without fungicides/aerification/water now is more healthy with little attention.

The list of advantages could go on. A final point is worth noting. The investment in work and time is formidable and requires an effort to keep the sod used for reshaping free of contaminants, especially annual bluegrass. What has worked for us is a fall application of *Prograss* and a spring application of a pre-emergence herbicide. As time goes on I'll know if these are annual or biennial applications.

At the outset of the project we contracted a couple of fairways. We now know that it is quicker and less expensive to



There is no small amount of hand work involved.

do the work in mid-summer with our own employees.

Fairway reshaping, in my view, is one of those things that gives a maximum return for the time, effort and cost involved. Give it a try—I think you will agree. 🙌



The new shape becomes apparent quickly.



Hand raking to clean up the last of the mess before fertilizing and cultivation.



AFTER—What a difference a week makes!



These projects require a LOT of sod!



One of our previous projects—from 1992—the ninth fairway at Blackhawk Country Club.



His Career and Retirement Are Rooted in Plants

By Lori Ward Bocher

When Editor Monroe gives me the name of the next "personality" for this "profile" page, he usually provides some background information on the subject. Such was the case when he asked me to interview Prof. Edward Hasselkus, University of Wisconsin-Madison Departments of Horticulture and Landscape Architecture.

"One of my favorite professors," Monroe admitted. "Former students love him. Respected and admired. Sophisticated. Ambitious and hard working. Tall, stately, debonair."

A week or two later I called Prof. Hasselkus and introduced myself.

"Is your maiden name Ward?" he asked.

"Yes."

"Is Bill Ward your dad?"

"Ahhh, yes."

"Your father and I figured out a few years ago that we're very distantly related," he continued. "On the Lean side."

"You're kidding!" I answered. But in reality, I wasn't too surprised that we were related. After hearing Monroe's glowing remarks about Prof. Hasselkus, it only seemed natural!

Prof. Hasselkus is as native to Wisconsin as the Sugar maple. "I have Wisconsin roots all the way back to my great-great grandparents," he points out. He himself was born in Wisconsin. All three of his degrees were earned at the University of Wisconsin. He's been a UW faculty member all of his professional life. And he's known throughout the state as an expert on woody ornamentals.

Being raised on a farm near Dousman in Waukesha County had an influence on Prof. Hasselkus. "It made me decide I never wanted to be a farmer," he admits. "But another major influence was that absolutely everyone in my family, all grandparents included, was an avid gardener. It was just part of us to dig in the soil and have fun growing things."

Nevertheless, Prof. Hasselkus decided to major in Pharmacy when he



Dr. Edward Hasselkus

attended the University of Wisconsin at Madison. "But then some of my friends pointed out my interest in plants," he explains. "I thought, 'Well, maybe that's what I should do.' So I switched my undergraduate degree to Landscape Architecture.

"In my junior year, I could see that I was more interested in the actual plants," he continues. "And I was a little nervous about sitting at a drawing board the rest of my life. I made the decision then that I was going to go on to graduate school."

He received his BS in 1954 and then served as an officer in the Army, stationed in England for 1½ years. "It was the beginning of a life-long love affair with England," Prof. Hasselkus points out. "I think my trip back this summer was my tenth."

Upon completing his Army duty, he was offered an assistantship at the UW. He received an MS in horticulture in 1958 and a PhD in horticulture and botany in 1962. And he joined the faculty of the Department of Horticulture and Landscape Architecture (the two were joined at the time) in 1961. "It certainly wasn't my life plan to remain at Wisconsin for my entire career," he

admits. "But it just happened that way. And, of course, I don't regret it."

For his 33 years at the UW, Prof. Hasselkus' appointment was 50 percent Extension and 50 percent teaching. "I was one of the relatively few people with a teaching and Extension split," he points out. "Things did get hectic, particularly in the spring. I don't know how many times I drove back to Madison late at night just because I had a class to teach the next morning. And then right after class I had to rush out to the Arboretum to stake out plants because it was the planting season."

But this split also allowed him to have contact with lots of people. "It was a pleasure to work with people, particularly through teaching," he says. "I enjoyed seeing students find their place in the world and the feeling that maybe I got them turned on to horticulture while they were here."

Golf course superintendents who graduated from the UW are familiar with his teaching. "All of the students in the turf program were required to take my courses, so I've gotten to know them all," Prof. Hasselkus says. "Off hand, I can think of two who went on to graduate school in horticulture with me, Andy Otting and David Guthery."

Even though he had a reputation as a tough grader, Monroe wasn't the only one who appreciated having Prof. Hasselkus as a teacher. In 1987 he won the UW-Madison Distinguished Teaching Award. "That was probably the most meaningful of all the awards I received," he points out. He also accepted teaching and advising awards from the College of Agriculture and Life Sciences, as well as awards from the Student Chapter of the American Society of Landscape Architects and the Department of Landscape Architecture.

In addition to teaching, Prof. Hasselkus was responsible for starting the student Horticulture Club on campus and served as its advisor for 19 years.

And he was advisor to Pi Alpha Xi, an honorary society, for 10 years.

He keeps in touch with about 250 former students through an annual New Year letter that he has been writing for 19 years. "I tell about what's going on at the campus. And, with the news that they send me, I tell about what they are doing — new positions, who got married, those kinds of things. They won't let me stop. I suppose I'll have to continue doing this in retirement."

In retirement, he'll also continue as curator of the Longenecker Gardens at the UW-Madison Arboretum, a position he has held since 1966. The approximately 50-acre garden was begun in 1935 by Prof. Longenecker. "He happened to be my undergraduate advisor," Prof. Hasselkus points out.

The gardens are used for field evaluation of landscape plants and for teaching. They're also open to the public. "Prof. Longenecker felt strongly that not every visitor is going to want to look carefully at each individual plant," Prof. Hasselkus explains. "Rather than plant things in rows, he designed a pleasing landscape so that the design itself would have an impact on the visitor."

Today, Longenecker Gardens has the most significant lilac collection in the midwest, the most up-to-date collection of ornamental crabapples in the world, the largest collection of trees and shrubs in Wisconsin, and probably the largest number of cultivars of trees and shrubs in the upper midwest, according to Prof. Hasselkus. "It's 'Mecca' to a lot of plant people," he adds.

Although he is well known for his work at Longenecker Gardens, Prof. Hasselkus has plenty of other feathers for his professional hat. "I have been the keeper of records of the Wisconsin Champion Exotic Trees. In other words, I keep track of the largest non-native trees of every kind in the state," he explains.

He introduced two cultivars of serviceberries, Strata and Flambeau, and two cultivars of junipers, Wisconsin and Petite. He also introduced the Whitespire birch. "It is the first white bark birch that tolerates heat stress, which translates into resistance to the bronze birch borer," he explains. "It's grown all over the country now, probably the most commonly planted birch today.

"Ten year ago I started the Wisconsin Woody Plant Society, a group of

'plant nuts,'" he relates. "I organize a meeting every spring and fall. We usually get 80 to 100 people, a mix of advanced amateur and professionals. I have always maintained that people who like plants are nice people!

"They won't let me quit, either, so I'll have to continue organizing those meetings now that I'm retired," he adds. He'll also work with the International Ornamental Crabapple Society, which he helped found, and the American Conifer Society.

Prof. Hasselkus has received several awards for his professional work. "The L.C. Chadwick Award from the American Association of Nurserymen was very meaningful because it was the second one given in the country," he points out. "And the Linnaeus Award from the Chicago Horticultural Society meant a lot, too."

In addition to remaining active with many professional societies during his retirement, Prof. Hasselkus plans to write a book. "It will be a second edition of a book that's out of print, 'Trees and Shrubs for Northern Gardens,' published by the University of Minnesota Press," he reports. "I told them I'd do it after I was retired, so they've been breathing down my neck."

Retirement gives him time to reflect on his 33 years in the horticulture profession. "I started in Extension about the time Dutch elm disease entered Wisconsin," he points out. "In the early years of my career, I spent a lot of time working with municipalities with their street tree programs.

"I emphasized diversity of new plantings and made recommendations of which trees should be used to replace the American elm," he continues. "I think we learned the lesson to not overly rely on a single tree."

Since his early days with Extension, he also promoted serviceberries. "They were almost unknown then," he recalls. "They're a plant with year-round interest, something I've always promoted. The importance of flowers, yes, but also the importance of fruits and fall color and bark interest."

Prof. Hasselkus has worked with crabapples throughout his career and is known as a crabapple expert in the midwest. "The Hopa crabapple was the most popular when I started my career, but it was extremely susceptible to apple scab," he recalls. "I used the theme, 'Kick the Hopa habit,' as a title to talks."

As an Extension specialist, Prof. Hasselkus has had contact with Wisconsin golf course superintendents

through speaking engagements. "And several courses have asked me to help label the trees on the course," he points out.

"A pleasing landscape is one of the most important things there is to a golf course," he believes. "Landscape plants make a golf course special."

As an expert on landscape plants, it's no surprise that Prof. Hasselkus can't drive through a neighborhood without being fully aware of those plants. "It's surprising that I haven't had numerous accidents," he relates. "My wife is always shouting, 'Watch out!' I'm always looking at some wonderful tree. The beautifully shaped specimens really stand out for me."

His love of plants, combined with his love for travel, led to an unusual activity: hosting garden tours. "I hosted five different garden tours to Europe, and one to Australia and New Zealand," he explains. "I haven't done one for several years now because the ones that I wanted to do interfered with my teaching. So I plan to do more now that I'm retired. In fact, I'm planning to host a tour to western Europe next spring during tulip time."

From his numerous plant-related activities, it's obvious that Prof. Hasselkus has more than a professional interest in plants. "My interest in plants is both my vocation and my avoca-



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tion," he admits. "As I've often said, I probably would have done most of what I've done with plants whether or not I got paid."

Genealogy is one hobby that doesn't involve plants — except family trees. It's also the reason he knew that we were related. "My grade school teacher got me started with a class project," he recalls. "I've worked on genealogy all of these years. I expect to spend a lot of winter days at the State Historical Society Library now that I'm retired. I'm working on my wife's genealogy."

His hobbies are augmented by travel. "We never take a trip around the country or to Europe without working a little bit on genealogy," he reports. "And my wife allows no more than one garden visit per day when we're traveling!"

His wife, Betty, is an associate professor and the coordinator of the Occupational Therapy program in the department of Kinesiology (study of movement) at the UW. "She always worked at least part time as an OT," he explains. "Later in life, after the kids were grown, she went back to school and earned her PhD."

The Hasselkuses have two children. Jane is a market analyst with Kodak in Rochester, N.Y. John and his wife live in Germantown, Md., where he just started a high-tech computer company with three other people.

For most of his career at the UW, the Hasselkuses lived in University Heights, six blocks from his office. "I always walked, never had a parking place on the campus for 27 years," he recalls. "But as retirement approached, we decided to move to Nakoma to be closer to the Arboretum. That was about six years ago. We love where we live and expect to spend the rest of our days right in our house on Miami Pass."

Well, maybe he won't spend too many days at home. In case you haven't been keeping track, Prof. Hasselkus has numerous endeavors planned for his retirement: continuing the newsletter for horticulture graduates; serving as curator of Longenecker Gardens; planning meetings for the Wisconsin Woody Plant Society; working with other professional societies; writing a book; hosting garden tours; and spending more time on genealogy.

He must have inherited all of the energy in "our" family! 🌱

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