

The Human Side of Turfgrass Management

Putting into human terms important aspects of golf course turf management.

BY STEVE ISAAC

Try explaining the problems you face as a turfgrass manager to committee members or golfers and, more often than not, you will get blank looks. It is not that the people we come across in our working lives lack intelligence; they simply lack understanding of what is a fairly complex and technical business, usually because it is not their primary business. In an attempt to increase comprehension when I was a practicing agronomist, I used an analogy that everyone could relate to — comparing the golf course and its maintenance to their own body and its upkeep. Suddenly, eyes and minds were opened. So, how does this approach work?

WE ARE WHAT WE ARE BORN INTO . . .

Human development is controlled by the environment we are born into and grow up in, the influence of family, friends, and our genes. Grasses are no different. Sowing or sodding into a poor environment will result in a weak stand of grass, one that is difficult to manage and one that is likely to be overrun by undesirables (e.g., weeds). A poor environment for grass means inadequate drainage and access to sunlight. We need air to breathe and sunlight to avert health problems. So does the grass!

So, the human condition can be used to explain why some grass species grow happily in a particular situation while others struggle. However, it is not as simple as that. If you are not ideally adapted to a specific environment, you might be able to do some-



This device, which measures the trueness of a putting surface, will give the superintendent the information he needs to present better surfaces for the golfer.

thing about it: change the environment or change yourself. We can do the same for turf, e.g., change the environment by improving drainage or removing trees to increase sunlight. Each grass species is adapted to do best in certain environmental conditions and under certain management regimes. Plant breeding can widen the tolerance of grasses to such conditions and factors imposed by management, e.g., mowing height, but the wrong grass growing in the wrong environment will not survive.

A HEALTHY LIFESTYLE

These days, we are constantly being bombarded with warnings about the need to lead a healthy lifestyle. Eat a balanced diet and get regular exercise. Well, the same philosophy can be applied to the grasses on a golf course.

Being obese is not a healthy option, and it can lead to heart and circulation problems. We can become obese if we eat too much, and in a similar regard, so can turf. If it is overfed with nitrogen, grass growth is lush and its tissues are soft. This condition makes it more

prone to disease and damage from other sources of stress as the grass lays down thatch at a greater rate than it can be controlled. Thatch is the equivalent of the fat we develop if we overindulge.

Thatch is the “cholesterol” of grass. It blocks the drainage arteries that are so vital to the production of free-draining, healthy greens, tees, and fairways. Few laymen appreciate how thatch adversely affects turf health and playability. I will never forget a discussion I had on a green with members of a club committee many years ago. It was a freezing, cold spring day and it had been an exceptionally wet start to the year. The committee people were bemoaning the fact that their *Poa annua*-dominated greens were a sickly yellow color, and they wanted to know why the greenkeeper wasn’t producing nicely striped, green putting surfaces, just like the ones they had just seen on television. A plug was taken from the green and they were shown the thatch, which was saturated with cold water. They were asked what they thought their feet would look like if they had spent the winter months in a bucket of cold water. None were prepared to take up the challenge, but they quickly realized why we repeatedly talked about the need to control thatch and improve drainage as we walked the course.

Just as being clinically overweight can increase our risk of disease, so lush growth in grasses can bring about more debilitating conditions, e.g., *Michrodochium* patch in the United Kingdom and other cool, damp climates. The converse to this scenario also holds true to the analogy. Inadequate nutrition can result in anorexic turf. For turfgrass, dieting to “skin and bone” takes on the appearance of a sparse grass cover prone to moss, the invasion of *Poa annua*, and specific diseases such as dollar spot.

In addition to following a healthy, balanced diet, how do we prevent health issues? Exercise. While plant



Aeration holes are an essential means of respiratory aid for turfgrass, and no grass will tolerate the stresses imposed on putting surfaces if they are in deep shade.

breeders have yet to develop a grass that can do bench presses or go jogging, there is plenty the superintendent can do to burn off that thatch. Prevention is always better than cure, for us and for the grass, so feed and water wisely and implement regular grooming, aeration, and topdressing programs to prevent excess fat — sorry, thatch — from accumulating.

While routine thatch management might be considered a gentle aerobics session, if your turf is already suffering from obesity, then it will need a more strenuous workout to get it back into shape. Core aeration, heavier sanding, deep scarification — turf’s equivalent to liposuction! Men sweat, women glow, and turf transpires. Never forget this point.

If asked why you need to keep disturbing the greens with all of these disruptive maintenance practices, the answer is that thatch is like our hair; it just keeps growing and needs to be trimmed on a regular basis to keep it in check. If you are talking to someone who is follicly challenged, refer to fingernails instead!

A strong plant needs a good root mass to support it, and this is achieved through the regular exercise of aeration and a good diet, much in the same way that bone diseases such as osteoporosis and muscle wastage are prevented.

Healthy grass, like healthy people, can fight off infections and other problems. In the U.K., *Michrodochium* patch is just like the common cold, and I will leave the human equivalent of nema-



GOOD PARENTING SKILLS

Unfortunately, we are not born with an innate sense of what is good for us, and the way we turn out is often a result of the way we are brought up. Children are all different and a good parent will recognize this and treat each child as an individual. The same applies to grass. There are a relatively small number of turfgrass species used on golf courses around the world, and each species has its own preferred environment and management requirements. The course superintendent (taking the role of the turf parent) has to understand this if the end result is to provide a quality and sustainable playing experience. The golf course superintendent also needs to include the rest of the golf course team in this responsibility. Each person — the golf course superintendent, golf professional, club manager, ownership, and course officials — all are “ownership partners” in the golf course they care for and enjoy.

Parents generally want what is best for their kids, and many avidly follow the advice of child-rearing experts. Implementing best practices on the golf course shows the same degree of care. The USGA, through its Green Section, and The R&A, via its bestcourseforgolf.org Web site, recognize this need. The agronomist might be considered the turf physician, a consultant brought in for a second opinion.

In order to keep ourselves in good order, we will go for a routine checkup at the health center. Benchmarking could be considered the golf course equivalent, whereby the impact of inputs on its performance are measured and compared year after year. In much the same way as we use tools to measure our fitness, e.g., devices to determine heart rate, blood pressure, the dreaded scale, and so on, implements are necessary to assess the health of our turf. We can measure drainage rates, organic content, and other factors relating to the physical condition of

tode attack to your own imagination. Popping pills is not a positive lifestyle choice, and no superintendent should take pleasure in spraying turf with pesticides — in some cases it can be addictive. Following a well-turf program should reduce the need to reach for medication. This is good advice for both the grass we are trying to grow and for ourselves as human beings.

If the health of a green is beyond redemption and, let's be honest, we all start to show signs of wear with age, then it may be necessary to do some plastic surgery through regrassing or reconstruction. These options always need to be in the back of all our minds as golf courses (and ourselves) age. Few things age gracefully (my apologies to fine clarets).



Thatch clogs the “arterial” drainage channels, resulting in unhealthy grass.

the grass, but we also need to assess how the turf performs for the golfer. Devices to measure the firmness of turf and the trueness of putting surfaces are under development. Right or wrong, the Stimpmeter has become part of the nomenclature of golf and turf management. These and other tools could also take their place in the turf industry.

FINAL THOUGHTS

Some turf professionals might consider the approach described in this article as overly simplistic in discussing what is a specialized and skilled activity. However, trying to blind golfers and committees with science often results in a lack of understanding and empathy, resulting in mistrust. Golfers pay our wages, and if they are interested to know what happens on their golf course, then it is necessary to explain the processes in an understandable manner. Good communication is not simply about providing *a lot of information*; it is all about supplying knowledge in a way that others can follow, and using an analogy that consistently taps into something they are familiar with may, to continue the theme of this piece, open eyes, ears, and minds both for ourselves as well as the golf courses we maintain and play.

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