

EASING THE PRESSURE!

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The logo for STRI (Sustainable Turfgrass Research Institute) features the acronym 'STRI' in white, bold, sans-serif capital letters. The text is set against a dark green rectangular background. To the right of the text, there are several stylized, light green grass blades that appear to be growing upwards and to the right.

The Disturbance Theory

If you want to favour the finer grasses you need to minimise all forms of damage. Non-aggressive surface preparations are required as is the considerate management of play, especially in the winter. This article is about easing the pressure of play.

A recap

Disturbance pressure is the removal or damage of plant biomass. Where disturbance pressure is high annual meadow-grass will dominate. Conversely, where disturbance pressure is low and the environment is settled the finer grasses will thrive. It is these settled conditions we are trying to create to favour the finer grasses. To ease disturbance pressure and create a settled environment we need to prepare the surfaces considerately. This means we use top dressing and rolling rather than scalping and incessant verticutting. The key message is the finer grasses don't like aggressive management.

The pressure of play

Disturbance pressure comes from maintenance and play. The pressure from maintenance has been discussed in previous articles (see *Do Not Disturb & Is Verticutting Necessary?*). Here we are concentrating on the pressure from play. The pressure from play predominately comes from foot traffic and pitch marks. To illustrate the pressure from play, one four ball can result in approximately 600 footprints around a six foot radius of the pin (*Dave Pelz Putting Bible*). If we are to promote the finer grasses in our greens we have to manage this pressure and make sure it does not become too extreme.

Under pressure

The growing point of the grass plant is its crown. If this becomes injured or damaged the grass stops growing and the turf fails to recover. With continued injury, the turf thins-out. This effect is magnified when the turf is dormant. Annual meadow-grass can then invade the gap through seeding and take advantage of this thin turf. This is how annual meadow grass gains a foothold in our turf.

Today's pressure

So, the pressure from daily play is a big factor in the species composition of our surfaces. This can be easily seen on many courses. For instance, it is very common to see the central sections of greens (which receive the most pin positions) and the entry/exit points of many greens supporting greater populations of annual meadowgrass, yet the finer grasses remain ever present in the peripheries of such greens.

Easing the pressure

To ease the pressure of play on our greens we rely upon the support from our golfers. Their reward will be superior putting surfaces that offer the true thrill to the game. Let us consider some measures we can take to ease the pressure on our turf.

- **Winter mowing height**
To protect the turf from winter play and avoid it thinning it is important to raise the cutting height early in the autumn. You need to find a height at which your turf and golfers are comfortable with. Just don't be tempted to cut too low during the winter.
- **Move the pins**
As with all greenkeeping practices there is no set frequency on how often to change your hole locations. The weather and intensity of play will have a major effect on the frequency of pin movement. It will therefore vary from week to week. Therefore, just watch the turf and make a judgement. Of course the bigger your greens, the more pin positions you have available. Therefore, if you are thinking of rebuilding a green always make it as big as possible. What is more, ensure your greens are not becoming smaller. With more space promoting the finer grasses is an easier task.
- **Winter pin positions**
During the winter, give the centres of the green a rest and get as many pins to the edges. Remember, there is no 3-yard rule in the Rules of Golf it is just a guideline. Therefore, in the depth of winter you can be a little more creative with your pin placements. Your golfers will thank you for it when they have better greens in the spring.
- **Alter traffic routes**
Traffic tends to follow the shortest route. With more golfers using golf trolleys, entry and exit points to and from greens become tighter and more defined. This concentrates wear. It often results in distinct tracks of annual meadow-grass dominated turf. Therefore, counter this by forcing golfers to use alternative entry and exit points. In the winter use ropes, white lines and hoops to help but also consider constructing alternative winter tees to help spread the wear. It all helps.

- **Temporary greens**
It must be our aim to play on the main greens all year. However, if the turf is looking tired and thin during the winter, we should give the turf some rest. Alternatively, if the greens are waterlogged or bound by frost don't be tempted to play on them. I am sure the golfers will understand when they are rewarded with better greens in the spring. However, to keep them on your side, make sure you provide good quality temporary greens for them to play on.
- **Metal or soft spikes?**
The type of spikes used in golfer's shoes does have an effect on the disturbance pressure imparted on the turf. This was proven by STRI research in 2002, which showed metal spikes resulted in more bare ground compared to soft spikes. This bare ground would be susceptible to annual meadow-grass ingress. Therefore, encouraging golfers to use soft spikes will help ease the pressure on the turf.
- **Pitch marks**
Pitch marks can either severely bruise the turf or worse still create a gap in which annual meadow-grass can invade. It is common to see pockets of meadow-grass plants to the front of greens dominated by the finer grasses. The source of invasion is clearly from unrepaired or incorrectly repaired pitch marks. Therefore, to ensure this form of disturbance pressure is relaxed ensure golfers adhere to the etiquette of the game by repairing their pitch marks.
- **Don't forget the soil**
We have purposely concentrated on the direct effect of wear on the turf. However, we should not forget play results in compaction, especially during wet weather. This compaction constraints growth (and recovery) and can leave the turf thin and prone to annual meadow-grass invasion. Therefore, to ensure the right soil conditions are created to promote the finer grasses timely aeration is essential (see One Step Back).
- **A settled environment**
To promote the finer grasses in your greens you must ease the disturbance pressure on your turf. This creates the settled environment in which these superior grasses will thrive. To achieve this aim, we must alter our greenkeeping practices but also manage wear more effectively. We are not talking about closing courses but rather being a little more considerate to the pressure we are exerting on our turf. To help us here, we need the support from the golfers. Their support will be rewarded with superior putting surfaces. Believe me, they will be a joy to play upon.

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