

# Turfgrass Producers International North Carolina Sod Producers Association



Friday, April 5, 2019

Harry L. Smith, Jr.  
Chair, UNC Board of Governors  
681 VOA Site C Rd  
Greenville, NC 27834



Dear Mr. Smith,

The recent decision by North Carolina's flagship educational institution (UNC) to remove natural grass from Kenan Memorial Stadium and replace it with plastic, synthetic turf is troubling and should be cause for concern. The natural grass currently in Kenan Memorial Stadium was grown at a farm in Indian Trail, NC and its success has routinely been featured in local news and national magazines. It was also awarded Field of the Year by the national Sports Turf Managers Association (STMA) in 2018. As a result, it is clear that this decision has little to do with field performance, health, or safety and more to do with the impulse and preference of an incoming coach. It also appears that this decision was made with little to no regard for the health and welfare of UNC student-athletes or of the countless children who will be affected if local schools and communities follow this example.

The American Journal of Sports Medicine recently published a peer-reviewed research article in 2019 that proves plastic, synthetic athletic fields result in a significantly higher injury rate among NFL athletes. The highlights of this research study are provided below and show that natural grass fields are safer than plastic, synthetic fields and result in fewer lower-body injuries to athletes. It has also been shown that 1 in 5 concussions are caused by head-to-turf impacts and that the critical fall height for concussions on synthetic turf is less than half of the critical fall height on natural grass.

**American Journal of Sports Medicine, 2019 Research Publication "Higher Rates of Lower Extremity Injury Rates on Synthetic Turf Compared with Natural Turf Among NFL Athletes"**

- 1,280 NFL games (213,935 distinct plays) were played during the 2012-16 Seasons
- 4,801 lower body injuries occurred affecting 2,032 NFL Players
- Synthetic turf resulted in a 27% increase in non-contact lower body injuries
- There was a 56% higher knee/ankle/foot injury rate on synthetic turf resulting in any time lost from injury and a 67% higher injury rate resulting in  $\geq 8$  days time lost from injury.
- There was a 68% higher ankle injury rate on synthetic turf resulting in any time lost from injury and a 103% increase in injury rates on synthetic turf resulting in  $\geq 8$  days time lost from injury.
- Applying the incidence rate ratios of injuries in this study, if every NFL game were played on natural grass during these 5 seasons, there would have been 319 fewer lower body injuries.

This is widely recognized among professional athletes and is documented in NFL player surveys:

- 82.4% of NFL players think that artificial turf contributes more to injury
- 89.1% of NFL players think that artificial turf causes more soreness and fatigue
- 89.7% of NFL players think that artificial turf is more likely to shorten their career

The removal of natural grass at UNC's Kenan Stadium is more than just a decision by an incoming football coach to switch playing surfaces. It sets a precedent by one of North Carolina's leading educational institutions who has chosen to replace a locally-grown, successful, NC agricultural product with an out-of-state plastic product that is not only more expensive, but less safe for NC kids and athletes. North Carolina schools and communities look to the UNC system to set the standard for safety and health, and we feel that this decision falls far short of the positive example expected of the UNC system's flagship institution.

Furthermore, it is also clear that no consideration was given to the impact of this decision on North Carolina's agricultural community or the precedent that it sets for local schools, athletic fields, and community parks. Every year, NC Sod Producers grow over 13,000 acres of sod valued at \$47 million but lose local business to out-of-state plastic, synthetic field companies that falsely claim their product is cheaper, safer, and maintenance free when in fact none of which are true. Kenan stadium has long been a perfect venue to highlight the NCDA slogan "Got to be NC Agriculture", and it is a public insult to NC's agricultural industry that this locally produced agricultural product may be replaced with an out-of-state plastic product.

The natural grass currently in Kenan Memorial Stadium and the 2018 National STMA Field of the Year will provide the safest possible playing surface for UNC student-athletes for many years to come. We urge our state lawmakers and UNC Board of Governors to put the safety and health of North Carolina children and student athletes first by choosing a safer, locally produced product in NC natural grass. As proud, life-long North Carolinians, my constituents and I feel like this would serve as a shining example for our NC schools and communities by meeting or exceeding the highest standard of safety that is expected of the UNC system while at the same time showcasing the pride and value of NC Agriculture.

Sincerely yours,



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**CC:**

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*The original research referenced in this letter appears in The American Journal of Sports Medicine, 2019;47(1): 189-196, DOI: 10.1177/0363546518808499.*