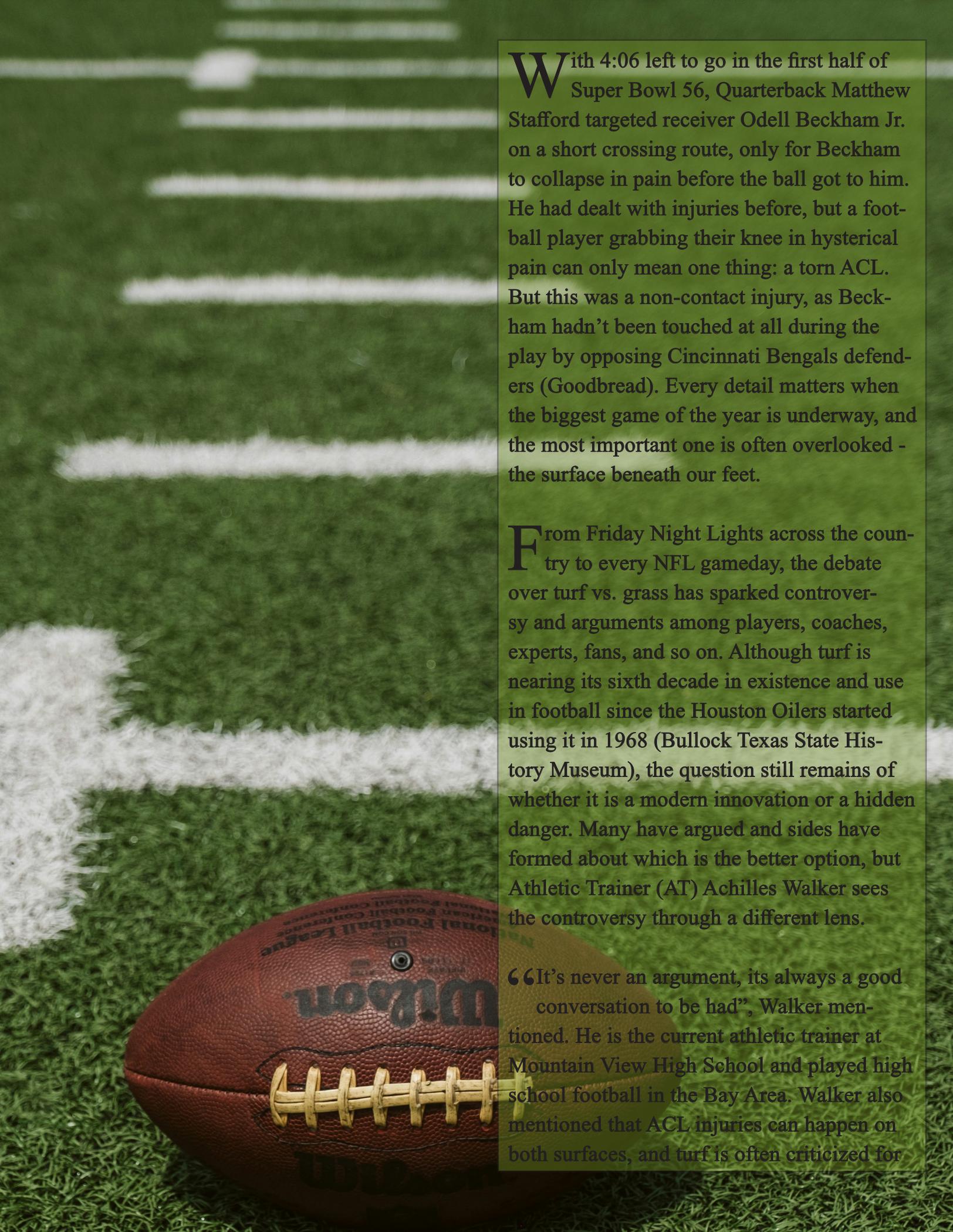




*Surface Tension:
The Turf vs. Grass Dilemma*
by Stephen Messner

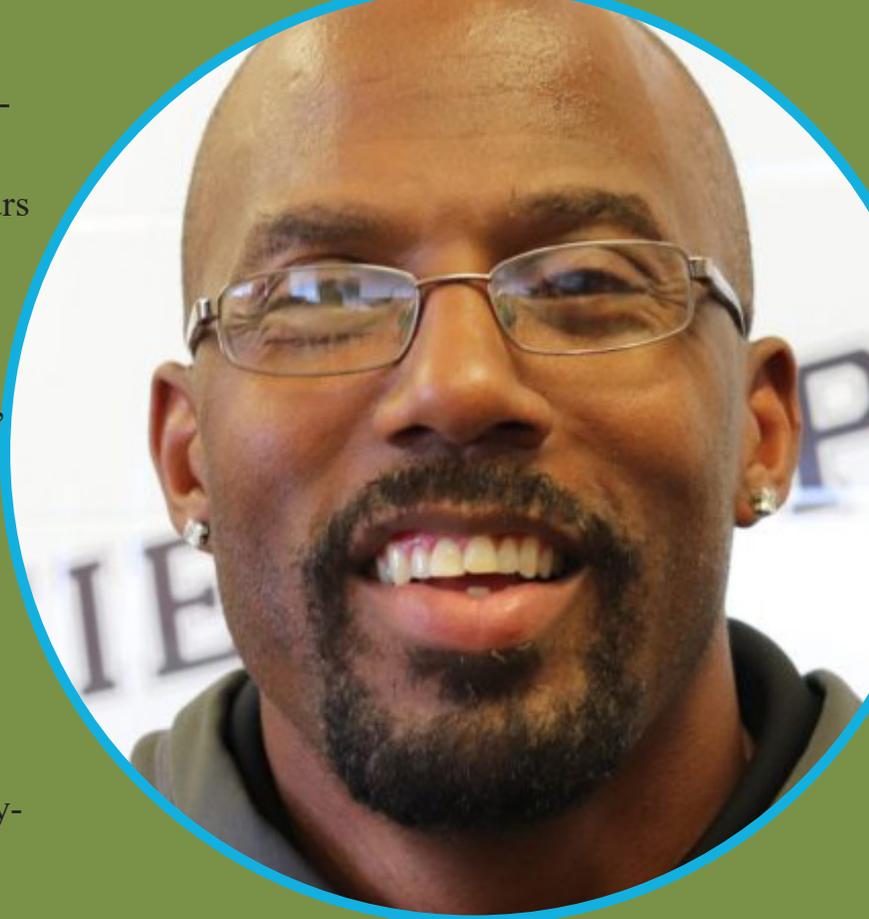


With 4:06 left to go in the first half of Super Bowl 56, Quarterback Matthew Stafford targeted receiver Odell Beckham Jr. on a short crossing route, only for Beckham to collapse in pain before the ball got to him. He had dealt with injuries before, but a football player grabbing their knee in hysterical pain can only mean one thing: a torn ACL. But this was a non-contact injury, as Beckham hadn't been touched at all during the play by opposing Cincinnati Bengals defenders (Goodbread). Every detail matters when the biggest game of the year is underway, and the most important one is often overlooked - the surface beneath our feet.

From Friday Night Lights across the country to every NFL gameday, the debate over turf vs. grass has sparked controversy and arguments among players, coaches, experts, fans, and so on. Although turf is nearing its sixth decade in existence and use in football since the Houston Oilers started using it in 1968 (Bullock Texas State History Museum), the question still remains of whether it is a modern innovation or a hidden danger. Many have argued and sides have formed about which is the better option, but Athletic Trainer (AT) Achilles Walker sees the controversy through a different lens.

“It’s never an argument, it’s always a good conversation to be had”, Walker mentioned. He is the current athletic trainer at Mountain View High School and played high school football in the Bay Area. Walker also mentioned that ACL injuries can happen on both surfaces, and turf is often criticized for

causing more non-contact injuries. However, he believes turf itself doesn't cause the injury, as he has suffered multiple ACL tears on grass and turf: "It's how I stepped, or how my body moved when I put my foot down right, or as I was cutting, or as I was changing direction" (Walker). Grass fields, on the other hand, can offer more natural movement and a softer impact, but are not without their own cons. If it rains, mud, uneven surfaces, and hidden ditches can inflict injuries just as much as turf, but for different reasons. The key issue isn't necessarily the surface itself but how athletes move on it and the maintenance of the playing field.



Yet beyond playability and upkeep, the environmental impact and resource demands of turf versus grass also weigh heavily in this debate. Turf fields require less consistent maintenance compared to grass, making them a more cost-effective option over time. "Turf up front, definitely expensive," said Walker.

"It's how I stepped, or how my body moved down"

"It's not cheap by any means, but look at it 10 years down the road, it's cheaper, especially when we're in a drought. Turf absorbs heat pretty easily, leading to dangerously high field temperatures, especially in warm climates like California, Texas, and Arizona, and so on. Tim Lugo, the current Athletic Director (AD) at Mountain View High School, recalled a time when he was working at Saratoga High School and saw the turf

ripped out of the ground to be replaced by next-generation turf. "There were these thick clouds coming from the ground", Lugo mentioned. Those clouds were the heat trapped underneath the turf being released. Grass fields absorb the heat slightly less than turf, but they require consistent watering, mowing, and maintenance to stay in game-ready condition. Many schools struggle with



maintenance costs, leading to poorly maintained fields that can add additional safety risks.

Even in professional sports, the debate rages on. While many NFL stadiums use turf for its durability, some teams still opt for grass, noting player preference and safety concerns. Hybrid models that combine elements of both surfaces are emerging as a possible solution, but the NFLPA (National Football League Players Association) and their president, JC Tretter, have stated “Until the risk of injury on turf mirrors the risk on grass, playing on turf is not in the best interest of our players”. After New York Jets quarterback Aaron Rodgers tore his achilles in the 2023 home opener at MetLife Stadium, known for inflicting numerous non-contact injuries to players over the years, the NFLPA Executive Director Lloyd Howell called out to NFL team owners to remove their turf fields and use grass instead

(Howell). Some of the most well known non-contact injuries that took place in MetLife Stadium were to Richard Sherman in Super Bowl 48, where he suffered a high ankle sprain early in the game, receiver Sterling Shepard tearing his achilles in 2021, then tearing his ACL the following year, alongside 49ers defensive end Nick Bosa tearing his ACL in 2020 - ending his season - and Jets receiver Garrett Wilson got his foot caught on the turf late in a game, ruling him out for the remainder of that game. And although the Jets won that game, Wilson was not happy with the turf at MetLife Stadium, calling it “garbage”, expressing his frustration about turf (Kerr). Ultimately, the decision for professional teams comes down to balancing safety, cost, and practicality, while high schools’ main first box to check off is the financial side. While grass is often preferred for its natural feel and lower injury risk, turf provides an all-weather, low-maintenance

alternative that keeps fields in playable condition year-round (FieldTurf). The discussion of turf versus grass goes beyond simple preference - it is about athlete safety, environmental impact, and meeting financial budgets. “At the end of the day, the only thing I care about is keeping athletes safe. A win for me is that both teams come back at the end of the game 100%” said Walker.

As artificial turf advances, new solutions may emerge onto the scene, to bridge the gap between safety, sustainability, and cost. Until then, the conversation will continue, with athletes, schools, and professional teams, striving to find the best possible playing surface for their needs. Walker summed it up best: “Take it [injuries from turf and/or grass] away, stop it? No, I don’t have that ability or that power, but I will do all in my power to make it safe for you guys”.



About the Author

Stephen Messner is a junior Film Student at Freestyle Academy and Mountain View High School. In his freetime, he enjoys playing football, weight lifting, listening to music, and spending time with his loved ones.

