# Improve your infill system for field hockey

riginally a male-dominated sport in Europe, Asia and the Middle East, field hockey has been popular with women since the game was introduced in the U.S. in the early 1900s. Over time, field hockey has gained in popularity and become a scholarship sport at the collegiate level. As field hockey programs continue to gain momentum, turf managers may need to consider and incorporate its needs when contemplating the switch to a multi-sport synthetic field.

Currently, the preferred surface for collegiate field hockey is AstroTurf, which provides players with the optimum playing surface, as its tightly knitted short pile surface allows for the quickest and truest ball movement. While AstroTurf is the ultimate synthetic surface option for field hockey players, particularly at the highest levels of competition, many institutions are beginning to convert their multi-sport surfaces to newer infilled polyethylene turf systems. The primary reason behind this shift is due to the infilled systems more closely mimicking the favorable attributes of wellmaintained natural grass. Infilled turf can however be designed to accommodate and benefit field hockey without compromising the requirements of other sports.

Typical multi-sport fields are infilled to a depth which leaves approximately 3/4inch of exposed fiber. Infill mix ratios range from 25-50 percent sand by volume. This composition does not provide a surface conducive to competitive field hockey as players prefer a harder, flatter surface to best showcase their talents. Raising the infill height and increasing the percentage of sand creates the effect of (continued on page 24)



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## green science

(continued from page 16) shorter grass and results in appropriate ball movement for field hockey without sacrificing playability for the other sports programs that share the field.

### **Case study**

The recent renovation of Granger Field at Clark University in Worcester, MA, is an excellent example of converting to synthetic turf with field hockey in mind. Clark's



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natural grass field hockey field proved difficult to maintain due to poor soils and overuse by all of the schools intercollegiate and intramural athletic programs. To maximize the use of the facility and their investment, school officials decided to convert the field surface to synthetic turf. Because the field would also serve as the primary baseball field and secondary soccer practice and game field, Clark's athletic director Linda Moulton selected infilled synthetic turf instead of traditional knitted nylon. The details of the design were made with the field hockey program in mind. With

input from coach Linda Wage, Clark's field consultant proposed modifying both the infill height and makeup to speed up the pace of the field. By adding a greater percentage of sand and leaving only 1/4 inch of exposed polyethylene fiber, the surface has proven smoother and swifter than off the shelf infilled products with less sand and a longer exposed pile height. A resilient rubber pad was installed underneath the carpet to mitigate the added surface firmness and maintain the standard safety requirements established for synthetic and natural turf fields.

Tufts University in Medford took its lead from Clark by making its field hockey needs integral to the design process. Like Clark, Tufts' multi-purpose natural grass field was difficult to maintain and did not provide a suitable surface for NCAA competition. Based on the same infill mix and pile height requirements and recommendations, Tufts now has a multi-sport infilled turf field that accommodates the many programs that use the facility and takes into account the preferences of its primary occupant, the field hockey team. According to Tufts Athletic Director Bill Gehling, "By tweaking the commonly available infilled products, we have been able to satisfy the competitive needs of our field hockey program without sacrificing utility for our soccer, football, and lacrosse teams."

As schools continue to maximize the use of multi-purpose fields by switching to infilled synthetic turf, field hockey needs to have a voice in the decision-making process, especially when some or all of the funding for the new field is coming from the field hockey program. With proper planning, the competitive requirements of field hockey can and should be included in the design process. With these few simple adjustments, field hockey teams can play the sport the way it is meant to be played without losing their competitive advantage. ST

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