

UConn Athletic Field Traffic Simulator



2017 UConn Research will conduct athletic field research using simulated traffic to add a real world component to the research.

The University of Connecticut approached the board of the NERTF in 2017 with a request to build their own Brinkman Athletic Field Traffic Simulator. Along with unprecedented increases in field use, many state and localities are passing regulations that limit or ban, pesticides, fertilizers and water on municipal and school grounds. As a result of increased regulation and athletic field traffic there is a need to accelerate turfgrass research to help field managers maintain quality turf and playing conditions. The Brinkman Traffic Simulator will would allow turfgrass researchers to enhance and increase athletic field research. The simulator would be used to evaluate turfgrass quality on athletic field turfgrass studies subjected to traffic. There are no commercially-available simulators; therefore the simulator must be fabricated based on plans of existing simulators that have been built for similar projects at other institutions. The simulator contains two drums with equally spaced “cleats” that are attached to by a drive chain but are turning differentially at different speeds to simulate traffic action as it is towed behind a work vehicle. The hydraulic component lifts the unit off the turf to reverse direction or for turning and transport.

The simulator was constructed by the University’s Technical Services Department. Total cost: \$10,000.00