

Athletic Field Traffic Survey and Quality Assessment
D.D. Minner

How much traffic is too much traffic? This is an important issue and we need your help in defining traffic limits for fields. City planners want to know how many fields to build to generate a certain revenue, coaches and user groups ask because they don't want to limit use of the fields, the band questions why they can't use the field also, and the sports turf manager wants to know so that they can control field use and plan an effective management program. The answer is not with me or any other turf expert, instead the answer can be found within your own facility by quantitatively assessing the traffic on your facility. The following field rating system can be used to assess the conditions of your field. It is our intent to generate a more 'sport-facility-specific' survey that can be conducted on a national basis. Your comments to improve the survey to fit your needs are certainly welcome (dminner@iastate.edu). Those capable of determining "person hours" on the field will have a better model for predicting when too much traffic occurs.

Field identification – use one field per column and only report the actual traffic on that field.

Total events per field – Do not count just games. An event is any game, practice, or other activity that makes a contribution to the compaction, wear, or degradation of the field or grass surface. Use one game or practice to equal one event and then use your judgment to assess traffic caused by non-game events, i.e. walk through football practice = .75 event, band = 0.5 event, concert = 5 events. Be sure to account for all activity on the field.

Breakpoint number of events – beyond this number of events the field can not fully recover and will consequently enter the next season in a diminished condition.

Numeric field rating	% living green turf cover	Overall assessment	Breakthrough	Hardness	Softness
5, Best	90-100	Excellent	No breakthrough, thatch and mat in tact.	Good cleat penetration and cushion.	Good cleat penetration, stiffness, traction, and fast surface.
4	70-89	Good	No breakthrough, grass blades and thatch beginning to wear.	Good cleat penetration, moderated cushion.	Good footing, moderately stiff surface.
3	50-69	Fair	Some breakthrough, thatch beginning to wear, minor soil exposure.	Adequate cleat penetration, no effect on player performance.	Adequate stiffness, no effect on player performance.
2	30-49	Poor Not Acceptable	Substantial breakthrough, thatch/mat worn away, exposed soil.	Too hard for falling.	Poor grip and little resistance on foot plant, unstable, slow surface.
1, Worst	0-29	Very Poor Not acceptable	Very little vegetation, mostly exposed soil surface.	Poor cleat penetration, cleat skating on surface, hard like concrete.	Noticeable depressions and foot divots, player leg fatigue, unstable surface.

Athletic Field Traffic Survey - D.D. Minner

Field Identification (Football, baseball, softball, soccer, high school, college, adult, youth, etc.).															
Circle the level that best describes the activity your field receives.	Limited use Normal use Over used Grossly abused	Limited use Normal use Over used Grossly abused	Limited use Normal use Over used Grossly abused	Limited use Normal use Over used Grossly abused	Limited use Normal use Over used Grossly abused	Limited use Normal use Over used Grossly abused	Limited use Normal use Over used Grossly abused	Limited use Normal use Over used Grossly abused	Limited use Normal use Over used Grossly abused	Limited use Normal use Over used Grossly abused	Limited use Normal use Over used Grossly abused	Limited use Normal use Over used Grossly abused	Limited use Normal use Over used Grossly abused	Limited use Normal use Over used Grossly abused	Limited use Normal use Over used Grossly abused
Total number of events per field and duration of season (provide start and stop date for season)	Events	Season	Events	Season	Events	Season	Events	Season	Events	Season	Events	Season	Events	Season	Events
Breakpoint number of events , per field, until you feel the field is significantly damaged and can not be adequately repaired with the resources and budget you currently have.															
Preferred number of events per field that you feel the field can tolerate and still recover given the resources and budget you have.															
Fill in the blanks. I could maintain the field in good condition if after every ____ events I could rest the field for ____ days.	Events	Rest	Events	Rest	Events	Rest	Events	Rest	Events	Rest	Events	Rest	Events	Rest	Events
How would you rate this field when it is at its best and its worst (Rank your field on a scale of 1 to 5, 5=best. See Rating Table on reverse side)?	Best	Worst	Best	Worst	Best	Worst	Best	Worst	Best	Worst	Best	Worst	Best	Worst	Best
What is the soil type (sand-based, clay, loam)?															
Estimate the % of each grass type in your field (PR - Perennial rye, KB - Kentucky bluegrass, TF - Tall fescue, B - Bermudagrass)															
Check the level of management that your field receives in the following categories:	High	Med	Low	High	Med	Low	High	Med	Low	High	Med	Low	High	Med	Low
Irrigation															
Fertility															
Cultivation (Aeration, etc.)															
Topdressing															
Pest Control (Weeds, diseases, insects)															

Optional

Name, Facility/Address _____

Phone, E-mail _____

Please return this survey

FAX to: 515-294-0730

e-mail to: dminner@iastate.edu

MAIL to: Dave Minner, Iowa State University, 106 Horticulture, Ames, IA 50011