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Q&A

By DR. GRADY MILLER, ENVIRONMENTAL HORTICULTURE DEPT., UNIVERSITY OF FLORIDA

Using Athletic Fields

I have fiscal responsibility for our county athletic facilities. We recently completed a review of existing activities on our soccer fields and vehicle parking capacities. The data on field use is presented based on the actual hours of usage for each field as compared to the total number of available hours. Fields without lights are available 10 to 12 hours per day depending on daylight, whereas fields with lights are available approximately 13.5 hours per day year-round. The intent was to determine the potential for additional field lighting to allow for nighttime activities. What is an acceptable percentage of utilization of athletic fields to ensure turfgrass coverage and health?

How much play a field can take is certainly the million dollar question for people managing high demand, high use athletic fields. Your study on field use was the first one that I have seen that actually used percent utilization for field scheduling. Percentage utilization seems to be as effective as counting events in terms of utilization, but like other methods it ignores field conditions and recovery time.

For me it is probably easier to relay to a field manager when the field should be taken out of use than to a director who is trying to answer to all the user groups demanding a field. I believe, as I am sure you do, that every effort should be made to accommodate all groups that participate in field activities, but not at the expense of the fields. If the fields are overused, then the likelihood of a player becoming injured due to poor field conditions increases.

Number of events

Rather than percent utilization, I typically relate field use to number of events. I ask coaches and/or field managers how many games or matches have been played and the duration of these events and use a rule-of-thumb conversion. I equate soccer matches on a 2-hour per event basis. For instance, our school's intramural soccer matches last 1 hour, so two intramural soccer matches equal one event. The varsity soccer matches last 2 hours, so one varsity soccer

match equals one event. In my experience, lacrosse is extremely damaging in an area radiating out from the goal, but in other areas of the field it seems to be similar to soccer, so I use the same 2-hour conversion.

I treat football differently since it typically causes more injury than soccer and the games are variable in length. Because I relate events to damage, I usually figure 3 hours for high school football and 4 hours for college football, per event. Practices can also cause appreciable damage due to their repetitive nature in particular areas of a field, so they should also be put into the equation. Baseball and softball should be evaluated differently since so much of the game is played on a clay infield.

Keep in mind that the number of events a field can handle will ultimately depend upon weather conditions during the season (especially just before and during games), maintenance practices, recuperative periods, and the time of the year. To maximize field conditions, 1) make every effort to begin the sporting season with 100 percent turf coverage; 2) adjust maintenance practices to address the condition of the fields; 3) schedule recuperative times during the season, realizing that non-overseeded bermudagrass fields will not recuperate very quickly in the late fall or winter months; and 4) overseed if you expect excessive wear during cooler months that are not conducive for bermudagrass growth.

It has been my experience that these numbers are a good estimate for our non-overseeded bermudagrass fields in the fall, winter, and early spring months. Due to the rapid growth of bermudagrass in the late spring and summer in the southeast, I believe that a well-maintained bermudagrass field can tolerate about 50% more than the estimates above, if the "season" includes these months. If the bermudagrass field is overseeded, I also believe it can handle 50% more play.

Your summary table indicated that your soccer field C (with lights and overseeded) was rented for 870 hours between the months of October and April, slightly below your original target of 1,100 hours. This works out to be about 435 events for the season. If you could move some of the play to another field, field C

would certainly be in better shape by season's end. Unfortunately, your data indicates that most of your other fields are probably also exceeding their use capacity (based on my criteria). While adding lights to another field may reduce the need to use Field C, it will probably only encourage over-scheduling of another field. **ST**

Have Questions?

Send them to Grady Miller at the University of Florida, PO Box 110670, Gainesville, FL 32611, or email gmler@mail.ifas.ufl.edu. Or, send them to Dave Minner at Iowa State University, 106 Horticulture Hall, Ames, IA 50011, or email dminner@iastate.edu.