

Kick This Idea Around

Have questions? Send them to Dave at: ISU, Hort. Dept., Ames, IA 50011

by Dr. Dave Minner

The soccer club complains that we aren't maintaining the fields to their standards. Our complex has 18 fields where nine fields are used in spring and nine others in the fall for games, but are practiced on during these periods every day when games are not scheduled. We have 925 games per year. We don't have intensive management of the fields and there is no water available at this time. We do aerate several times per year, broadcast overseed three times per year and fertilize two or three times for a total of 2 lbs. N/1,000 sq. ft. and 9 lbs. P/1,000 sq. ft. We use a seed mix recommended by one of our turf dealers composed of Touchdown/American/Banff Kentucky bluegrass and Fiesta II/Blazer II perennial ryegrass. We have a native silty clay soil with low-medium P and excessive K. The fields are worn to the soil near the goals and centerfield area. The rest of the field areas have about 80 percent cover and were originally drill seeded. The drill rows are still visible, giving a corduroy appearance.

I am trying to put together a plan that provides the soccer club maximum use and which considers field condition. The fields are crowned and have adequate drainage. How can I improve my situation?

Terry Flatley
Parks Superintendent
Kenosha, Wisconsin

I like your plan of managing traffic by eliminating games and resting some fields in the spring and others in the fall. For more information about traffic scheduling check out the Q&As from Jan. 99 and Oct. 98. The rest period is certainly the time to increase turf cover and thicken the field. Be sure to do some of your overseeding at this time since there is less activity on these fields and a better chance for establishment. Drill seed in at least two directions. To reduce your problem with bumpy drill rows showing, you should increase the

number of passes you make when seeding and also increase the number of times per year that you drill seed.

The lack of irrigation is obviously a problem. Without it you will have a problem getting your seed to germinate and to push the field to fill in faster. The grass varieties that you are using are certainly suitable for sports fields. The rows that are still apparent from drill seeding may indicate that the field is not growing fast enough to cover in a reasonable amount of time. Your nitrogen rates, 2 lbs. N/1,000 sq. ft. per year, are sufficient for low maintenance turf areas, especially those that are not irrigated. However, for the soccer field you will want to increase your nitrogen rate to increase growth and help the surface fill in faster. If you are using only 2 lbs. N/1,000 sq. ft. per year, I have doubled your amount of fertilizer. Also keep in mind that you can apply an additional 1 lb. N/1,000 sq. ft. any time in the spring or fall if you think the field is not growing fast enough to please your clientele. I have not gone over 4 lbs. N/1,000 sq. ft. since you do not have irrigation. With an irrigation system you could use more nitrogen and also force the grass to fill in faster. Keep in mind that too much nitrogen without adequate irrigation can make your turf less able to withstand dry summer conditions.

The extra fertility will help the field fill in faster. The biggest problem you have is that you can't force grow the fields because you do not have an irrigation system. This program of increased fertility should get you more grass, but keep in mind it should also increase your need for mowing.

David D. Minner, Ph.D., is an associate professor with the Department of Horticulture at Iowa State University. He serves on STMA's Certification Committee. Send your questions to Dave at: ISU, Hort. Dept., Ames, IA 50011; or call: (515) 294-0730, or e-mail: dminner@iastate.edu.



Non-irrigated soccer fields used in the spring (April-June)

- March — Since your phosphorous level is low, apply a starter fertilizer with quick release nitrogen to jump-start the fields that are used in the spring. Something with micronutrients is also a benefit for early spring applications when soils are cool and root activity is just starting. Apply 1 lb. N/1,000 sq. ft.
- May — Apply slow release nitrogen that will be available during your field recovery time in the summer. Try SCU, PolyS or Nutralene. Apply 1 lb. N/1,000 sq. ft.
- September — This is the time to increase turf cover and thicken the field when it is not in use. Be sure to do your overseeding at this time since there is less activity on these fields. Drill seed in at least two directions. To reduce your problem with bumpy drill rows showing, you should increase the number of passes you make when seeding and also increase the number of times per year that you drill seed. The extra fertility will also help the field fill in faster. The biggest problem you have is that you can't force grow the fields because you do not have an irrigation system. This program of increased fertility should get you more grass, but keep in mind it should also increase your need for mowing. Apply 1 lb. N/1,000 sq. ft. using a soluble source. Since your phosphorous has been low, put another 1 lb. of P205 on the field. Drill seed the bad areas.
- October — Apply 1 lb. N/1,000 sq. ft. using a soluble source.
- Last fall game — Fertilizer quick release
- Total N — 4 lbs. N/1,000 sq. ft. per year

Non-irrigated soccer fields used in the fall (September-November)

- April — Since these fields receive less traffic in the spring you should be sure to drill seed now and apply a starter fertilizer. Apply 1 lb. N/1,000 sq. ft. with something like 10-20-0.
- May — Apply 1 lb. N/1,000 sq. ft. from a slow release nitrogen source.
- September — Apply 1 lb. N/1,000 sq. ft. using a soluble source.
- October — Apply 1 lb. N/1,000 sq. ft. using a soluble source. Since your phosphorous has been low put another 1 lb. of P205 on the field. Drill seed the bad areas.
- Total N — 4 lbs. N/1,000 sq. ft. per year.