Reed Union School District

Athletic Field Management

Guidelines

January 15, 2008

Preface

To begin, it should be understood that proper maintenance and management of these athletic fields are THE key factors in providing beautiful, safe and useable fields for the children of Reed Union School District. The word 'proper' can be construed several ways, but the intent of the following compilation is not to create a rigid set of tasks to be set forth and performed, but instead, it is to provide a baseline of generally accepted, green industry utilized procedures to follow. Flexibility, communication, and on site observation by the maintenance professional is critical to a successful maintenance program.

Summary of Maintenance Practices

Ryegrass blend	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
Mowing/Wk	1X	1X	1X	1X	2X	2X	2X	2X	2X	1X	1X	1X
Mowing Height	1-1/2"	1-1/2"	2"	2"	2"	2"	2"	2"	2"	1-1/2"	1-1/2"	1-1/2"
16-6-8 or calcium nitrate		X									X	X
42-0-0 or 23-5-10 (P&K necessary only when soils test show need).			X	X	X		X	X	X	X		
100% SCU (e.g.TriKote 42-0-0	X					X						
Iron or micros			X						X			
Aeration			X						X			
Rye Overseeding									X			

Mowing (Fescue/Kentucky bluegrass/ryegrass)

- Mow 1 to 2 times per week May through September.
  Mow once per week October through April.
- Mowing height should be 2 inches March to September and 1.5 inches from October to February

Collect Clippings

- Fescue/Kentucky bluegrass/ryegrass - Sweep, vacuum, collect in mower baskets or otherwise remove clippings from the turf after each mowing from April through October.

Edging

- All field perimeter edges and grass infield areas should be edged regularly to avoid a "lip" developing.
- Rake infield mix out of turf once per week minimum during baseball/softball season.

Aeration

- Aerate twice or three times per year with a piston driven aeration unit equipped with 3/4"hollow tines
- Drag the cores into the surface.
- Sweep/vacuum and collect turf tufts.

Fertilizing

- Fertilize with one pound of total N per 1000 sq ft of turf each month during March through October. P and K applications should be based on soil tests. The number of applications using 100% polymer coated such as 42-0-0 vs. a complete fertilizer such as 23-5-10 depends on soil tests.
- A mid winter application of N from a controlled release source such as Polyon or Tricote, or other polymer coated products at 2 lbs N/1000 sq ft should improve winter turf color and improve early spring growth.
- Apply 16-6-8 and/or calcium nitrate should also be done during one of the winter fertilizations.
- Apply ferrous sulphate, Ferromec or Micro-Mix spring and fall as a micronutrient source. This is a spray application.

Irrigation Maintenance

- Maintain records of water use.
- Do regular visual inspections of rotors/spray heads to assure appropriate coverage and minimize overspray.
- In fall, run the field as dry as possible prior to the onset of fall rains. This reduces weed invasion from winter weeds like Poa annua
- After watering, the soil should be moist to a depth of at least 3 or 4 inches, 6 inches is better.
- A target amount of water is 1.5 to 2 inches per week during hot weather.

Amount of Field Use Allowed

- Each field can only tolerate so much play before it is damaged. It is important to properly manage the use of the field.

- Turf can take a significant beating as long as it has about 10 times as long to recover. For example, if a two-hour event is held on a field, the field should have about 20 hours to recover. If two two-hour events are held on a given day, then 40 hours are needed. This is a general rule of thumb for normal high school sports use. Younger students may not wear out the turf as much and 'down' times may be decreased accordingly.

- It is important to distinguish damage that occurs due to overuse as opposed to turf management problems. Overuse is the most frequent cause of turf quality issues, followed by overwatering/poor drainage.

IPM (Integrated Pest Management) Program

- The District is regulated by the Healthy Schools Act of 2000, and in accordance with the Act, we have an Integrated Pest Management policy that governs the use of pesticides in our schools. The District's IPM policy fully complies with the regulations of the Healthy Schools Act. The IPM policy requires a review of the specific issue and consideration of a broad range of solutions; the District is expected to "use the most appropriate and least toxic method of control." Responsible use of pesticides means using them only when necessary, only in combination with other methods to reduce pests, and with a proper understanding of using chemicals. There is concurrence among the School Board on the Integrated Pest Management Policy in effect.

- The Director of Maintenance & Operations (M&O) is the primary contact for questions or information regarding oversight of Integrated Pest Management at the schools. The District Groundskeeper is also available to answer questions regarding pest management practices in the District.

- All records of pesticide use are kept at the District Maintenance and Operations Office. In addition, the District will monitor and document history specific to each field to enable a proper analysis. This data will be helpful to inform decisions on the proper care of the fields.

- Many insecticide and fungicides are toxic to aquatic invertebrates and these pesticides should not be used.

- The best way to minimize and reduce the risk of pesticides in the drainage water is to minimize and reduce their use by creating and maintaining healthy turf grass. Most weeds invade only in thin or bare spots in the turf canopy. Most diseases are only a problem on stressed turf, and healthy turf can tolerate a fair amount of insect feeding.

Order of Priorities for Sports Turf Management

Good prioritization is critical to having the best possible sports field. This priority list is not absolute but should be followed if possible. Holes, ruts etc. that may cause injuries should be fixed before the field is used. A gopher or mole problem should be taken care of immediately.

Typical Order of Priority

1. Adequate and even application of water is most important. Have trained and available labor for supplemental irrigation for times when the irrigation system cannot do the job.
2. Proper Mowing – height and frequency. The combination of top growth for wear tolerance and short mowing heights demand frequent mowing.
3. 3 to 4 pounds of actual nitrogen fertilizer per 1000 SF in the fall for Perennial Ryegrass blends. This should be applied in two or three applications between September and early November.
4. Overseeding thin or bare areas
5. Aeration two to three times. Sports played with cleats drive grass stems and leaves into the soil surface and interferes with air and water exchange to the roots.
6. Overseeding perennial rye in the fall.