

# Spring Help for Turf

By Holly Gibson

he first days of spring are a rallying call to every Jose Canseco-wanna-be or Olympic-oughta-be. Just like armchair athletes find that winter has left them with some rough (and soft) spots, athletic fields suffer similar fates.

As the weather warms, athletic field managers have little time to waste as they try to establish healthy turf that will maintain a high-quality playing surface through countless softball, baseball, soccer and rugby matches. A combination of seeding, core cultivation and topdressing can be the prescription for improving density and root growth on weak to moderate turf fields.

Turf in the winter is not immune to compaction problems. The turfgrass plant, especially the crown, is vulnerable to damage when feet or vehicles trample frozen or partially frozen ground. During the early spring, turf and soil tend to be wetter than normal, says Dr. Jim Watson, vice president, The Toro Company. The soil compacts easily. Vehicles can leave ruts and feet can leave footprints.

Early morning frost, which is typical in the spring, presents special problems. The frost consists of sharp, needlelike crystals. These crystals can damage the turf when people walk across the frosty ground. Whenever possible, keep people off frost-covered turf. If you can't prevent traffic, lightly syringe the turf with water to wash off the frost.

### **Core Cultivation**

Unless you address underlying compaction problems, seeding will just be a temporary cure. The stress induced by a hot, dry summer can leave bare or thin spots on compacted areas. The first step is to clean up the field, if you didn't already do it last fall after the football season. Use a mower with a grass catcher or a sweeper, Watson suggests. You want to pick up any loose plant parts (stolons or leaves), organic debris or other trash that may have accumulated during winter months.

There are several aerification methods vou can select. Watson recommends waiting until the turf is actively growing before aerating. By using a pressurized water aeration system, you can

Adjust the recommended seeding rates to conform to the density of the existing turf cover. The more established turf there is growing on a field, the less seed you will need.

aerate earlier in the season because this method does not disturb the soil as

Core aeration is the best choice if you also plan to seed. "You really want to use hollow tines so you bring up the

cores and use them for improving seedto-soil contact," says Trey Rogers, assistant professor at Michigan State University.

Rogers recommends using 5/8- to 3/4inch-diameter tines. You can use a tine harrow or a chain-link fence drag to break up the aeration cores so they may provide a light soil base for the seed to fall upon.

## **Spring Seeding**

If your field has thin to moderate turf coverage, spring seeding can help build the turf stand. If the field is thin to extremely thin, consider sodding.

As a rule of thumb, establishment rates for perennial ryegrasses are five to 10 pounds per 1,000 square feet, two to three pounds per 1,000 square feet for Kentucky bluegrass, and eight to 10 pounds per 1,000 square feet for fineleafed tall fescue. For the newer seeded varieties of bermudagrass, the estab-

continued on page 22

# We'd rather lug hose a mile than tear up a single foot of your fairway.

You've sunk a lot of money and work into shaping your course. So the last thing you need is a hydroseeding rig sunk up to the axles in your fairway. That's why we only spray from the ground. And tread lightly in the process.

ground. And tread lightly in the process.

As we spray, we cover every square foot from several angles to give you complete coverage and eliminate "shadowing."

We mix seed, sprig or mulch slurries to your exact specifications. If we err, it's on the side of generosity. We never skimp.

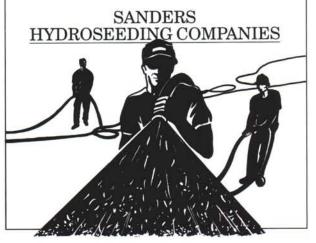
Whatever we do on your course—hydroseeding, hydromulching, stolonizing, erosion control, dust abatement, revegetation, fertilizing or straw mulching and punching-we do it with care and precision.

We do our best. And there's no one better.

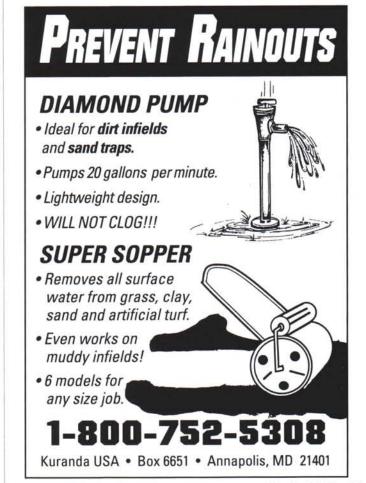
(714) 973-TURF FAX (714) 973-9120 1306 E. Pomona St., Santa Ana, CA 92705 C-27 License No. 600275 Bonded & Insured

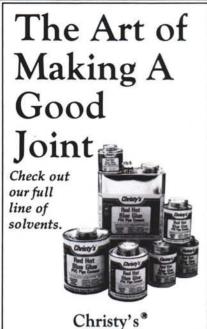
NO. 50-A Jalan Datuk Sulaiman. Taman Tun Dr. Ismail, 60000 Kuala Lumpur, Malaysia Tel 03-2333331 FAX 03-7175397

970 S. Marine Dr., Ste. 10-45-3 Tamuning, Guam 96911-340-3 671 649-9880 FAX 671 649-9896 Lic. No. 5575



Circle 114 on Postage Free Card





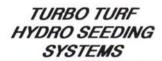
Christy's\*
RED HOT BLUE GLUE®



T. Christy Enterprises

403 West Brenna Lane Orange, CA 92667 1-800-BLU-GLUE FAX: 714-771-3029

Circle 116 on Postage Free Card



**CUT SEEDING COST 300%** 



- \* Fast, even applications
- \* Seed, mulch, fertilize in one step
- \* 150, 300, 500, 750, 1000 Gal sizes
- \* Spray controlled from the gun
- \* Simple to operate
- \* Leasing available

150 Gal. Systems \$ 2695 - \$ 2995

300 Gal. Systems \$ 3995 - \$ 4995

500 Gal. Systems \$ 4795 - \$ 6995

### BADGER ASSOCIATES

1108 Third Ave. New Brighton, Pa. 15066 1-800-822-3437

### **Spring Help for Turf**

continued from page 21

lishment seeding rate is one to two pounds per 1,000 square feet.

Adjust the recommended seeding rates to conform to the density of the existing turf cover. The more established turf there is growing on a field, the less seed you will need.

Seed more heavily with the fine-leafed tall fescues because fescues are slower to tiller, according to Rogers. Therefore, bare spots in a fescue field will be slower to fill in. Rogers recommends seeding fine-leafed fescues in three passes, providing the most uniform coverage. You can mix turf-type tall fescues with five to 10 percent by weight of Kentucky bluegrass to provide additional spreading.

You can use broadcast, drop or slicer/seeders to apply seed. If you are seeding in combination with core cultivation, use either a broadcast or drop seeder. A slicer/seeder will provide a limited amount of soil cultivation.

Rogers recommends applying a starter fertilizer with an NPK of 1-2-1 at a rate of 1/2- to 3/4-pound actual nitrogen per 1,000 square feet. If crabgrass is a problem, look for a starter fertilizer formulation that contains siduron, says Rogers. Siduron is labeled for crabgrass control and won't harm most newly seeded cool season turfgrasses when applied at label rates. Check the label to be sure it won't injure the turfgrass you are seeding.

### Topdressing

Topdressing can be part of a spring seeding and cultivation program. After cultivation and seeding, you can apply a light topdressing to help fill in the cultivation holes and provide a growing medium for the seed. Topdressing also helps insulate the growing turf.

"You can topdress in the spring with a mix that contains peat, gin trash, rice hulls, leaves or grass clippings, within the topdressing mix. That will tend to warm the soil. Light sand is beneficial from an insulation standpoint, but it will not retain heat from the sun like the darker peat and composted materials," says Watson. To apply the topdressing material, you can use either a rotating spreader-type or conventional drop-type topdresser. A rotating spreader-type topdresser applies material by feeding it down from a hopper through a chute to a rotating disk or impeller. The disk or impeller spreads the material in a wide swathe out the rear of the machine. These spreaders are best for making light sand applications quickly with a wide swathe.

A conventional drop-type machine uses a conveyor belt to carry topdressing from the hopper through the metering gate to the brush. A high-speed, rotating brush pushes the material down between the turf blades. A metering gate controls the flow so you can apply a sand layer from extremely fine up to 1/4-inch thick.

Whichever machine you choose, apply the mix to lightly cover the seed for a combination topdressing/seeding program.

### Pamper the Turf

The best results will come on a seeded field that doesn't have traffic stress. If possible, close the newly seeded fields to vehicular and pedestrian traffic. In the sports areas of many parks, this is not possible.

Rogers suggests changing the field layout temporarily so the area of heavy use is in another section of the field. This shift will give the turf a chance to become established. Once the turf improves, you can return the field to its regular dimensions.

Irrigate newly planted fields regularly, keeping the soil moist until the seed germinates. Then, reduce irrigation frequency and increase the amount, continuing to keep the root zone moist.

Pampering your sports turf in the spring will yield positive results when summer heat stresses the turf. Healthier turf will be in a much better position to withstand summer heat and drought.

Although spring is not the best time to seed cool season turfgrasses, many sports turf managers have no choice. By following these few guidelines, field quality will be noticeably better than without spring seeding.  $\square$