



# FOR SAFER TURF....

away, and the grooves filled with sand. The sand helps trap water and carry it into the soil. Roberts says the best time to renovate a field is in early spring or fall.

"There isn't really a good time, since most fields are used year 'round," he says. "But it should be done when the grass grows best. The summer is too hot and it doesn't heal rapidly."

## Seed selection

The variety of seed used on an athletic field makes a difference. Roberts emphasizes the necessity to always choose a name variety. "There's a bunch of these name brands out, and there's not a great deal of difference," Roberts says.

New varieties provide improved insect and disease resistance. Common varieties or blends don't guarantee enough cushion to a field, he says.

On cool-season fields, Roberts recommends using bluegrass (Adelphi, Baron, Touchdown, Glade, Merit, Midnight, Aspen). Bluegrass spreads by rhizomes. It holds together well under use and also forms a good sod. The rhizomes will automatically fill in divots in the field.

Turf-type tall fescue (Rebel, Houndog, Mustang, Olympic, Falcon, Apache) doesn't have the rhizomes found in bluegrass. Roberts describes it as a "clump-type" turf. It needs to be seeded close together. Despite the fact that it won't form sod, turf-type tall fescue does offer improved disease and insect resistance and provides a rugged cover.

Dr. Tom Turner, extension turf specialist at the University of Maryland, says turf-type tall fescues are best to use in the transition zone.

"In Maryland, we're strongly pushing turf-type tall fescues," he says. "You have to irrigate bluegrass in Maryland for it to survive well. It's too hot and humid in the summer."

Turner says Maryland is "in a hotbed of anti-pesticide groups." With improved insect resistance, the turf-type tall fescues offer a good compromise.

Perennial ryegrass (All\*Star, Repel, Manhattan II, Citation II, Fiesta, Pennant, Derby, Palmer) also doesn't spread by rhizomes, but, Roberts says, it is ideal for overseeding, repairing, or renovating a field. Several new varieties of ryegrass contain endophytes, which naturally fight insects.

Ryegrass can be blended with



Dr. Eliot Roberts

In order to build or maintain a good athletic field, Dr. Eliot Roberts, executive director of The Lawn Institute, suggests following these five guidelines:

1. **Land**—First assess the grade/slope of the land.

2. **Soil**—Take core samples to determine the depth of the topsoil, subsoil, and rock layer. Determine the mixture of sand, silt, and clay. To promote drainage, good fields should be about 85 percent sand. (See related story for an easy way to renovate a poorly constructed field) Check the physical properties of the soil such as the particle size.

While looking into the soil, consider how it will work with the installation of drainage, tile lines, and the irrigation system.

3. **Consultant**—Bring in a consultant or local extension agent who is knowledgeable in the design of drainage and irrigation systems. If you haven't determined the properties of the soil, use the consultant to do that at the same time.

4. **Seed**—Select a name seed variety with improved disease and insect resistance. The turf should be able to compete with weeds and take wear. Stay away from common varieties and blends.

Bluegrass works best in cool-season grass areas because it spreads by rhizomes. Turf-type tall fescues are recommended for areas in the transition zone because of insect resistance and drought tolerance. Ryegrasses are good for overseeding and repairing.

Most southern states use bermudagrass on athletic fields. Bahiagrass and kikuyagrass also work in some regions.

5. **Maintain**—After constructing a good athletic field, maintenance should not be neglected. Aeration is the number-one priority for any field. Aeration should be done as often as necessary in the spring and fall, in five directions, at a 3-inch depth.

Irrigation and cultural treatments can be determined by the soil analysis and turf variety used.

If you have any specific questions, be sure to consult your local extension agent.

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bluegrass, but Roberts advises against mixing it with tall fescues. "The ryegrass is more aggressive and tends to colonize," he explains. "It doesn't make for a uniform surface."

In warm-season turf regions, bermudagrass is most commonly used on sports fields. Some gulf coast states use bahiagrass. Several regions of Southern California use kikuyagrass, despite the fact that the Soil Conservation Service has outlawed it because it spreads into agricultural crops.

Centipedegrass won't take the wear of an athletic field. St. Augustinegrass and zoysiagrass get too thatchy and spongy to work well.

To manage a good athletic field, just remember:

## The key to top turf

To manage a good athletic field, just remember GRASS.

**G**et advice from a professional consultant or extension agent;

**R**ev up community support for the needed budgets or equipment;

**A**erate a good field regularly and often; but, if the field needs help;

**S**ample the soil and renovate the field if necessary;

**S**elect seed carefully, using name varieties only;

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*EDITOR'S NOTE: Special thanks to Dr. Fred Grau of the Musser Turfgrass Foundation and Dr. Eliot Roberts of The Lawn Institute for their time and effort in providing the WT&T staff with background information used in this series of articles.*