FIELD SCIENCE

How to prep fields By Chris Harrison

All summer long you coddled and nursed your turf. The playing fields looked great. Now, however, it's time to put that grass to bed for winter.

everal experts shared a comprehensive look at what turf managers should now do to prepare their fields for winter. Their tips range from fertilizing to using blankets to prepping the irrigation system.

"The most important part of your fall program is to have a plan," says Dave Minner, professor in the Iowa State University Horticulture Department, and a *SportsTurf* "Q&A" columnist. "Autumn is the best time to prepare the field for the rest of the year." Whether football, soccer, baseball or softball, he recommends starting the program right after the last game of the season.

"Cleaner is better," says Jay Warnick, CSFM. He is the grounds supervisor at BYU-Idaho and STMA Board member. He oversees the maintenance and construction of the landscape for the 200-acre central campus, including 35 acres of athletic fields and 200 acres of campus satellite facilities. Before his current position, Warnick was director of fields for the Seattle Seahawks.

Warnick is referring to everything from the field itself to the irrigation system.

"I like to see a shorter mowing height going into the winter," he says, adding that he has his best luck with verticutting, lowering the mowing height and cleaning up leaf matter.

While turf managers might hear about cutting heights from normal levels down to scalping a field to the crowns, Warnick says a post-dormancy mowing at normal height will be beneficial.

"I like to get out there with a rotary mower that has some lift to get old divots and clippings," he says. He follows with a basket or vacuum for cleaning. "It helps on the disease issues," he says.

On that front, he recommends a preventive application of a good granular fungicide, especially in areas where pink snow mold can raise its ugly head. He speaks from experience-at the University of Utah in Salt Lake City the field was heavy in ryegrass. "I lost 60% of the field. It was completely down," he says.

"Especially in areas that have more moisture than we do, a preventive application is a must," he continues.



Ross Kurcab checks his turf under its blanket at Invesco Field at Mile High in Denver.

While a clean field is important, Warnick says, "The biggest thing to do for winter is to make sure you have an adequate nutrient reserve down for the field."

At BYU-Idaho, that means application of one pound actual N per 1000 square feet. "That is slow-release nitrogen," Warnick explains. Because their pH's are very high, in the upper 8's to lower 9's, he does not use any P. But he does put K on the field at a one-to-one ratio with the nitrogen.

The high pH makes his job interesting. "I don't add acid. We manage the pH rather than try to correct it," Warnick says. They do use sulfur-coated fertilizer to help out a bit.

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Another recommendation from Warnick is to keep field moisture levels as high as practical. At BYU-Idaho, they frost at the end of September. "We are looking at irrigation blowout in early October," Warnick explains."We try to get moisture onto the field before blowout."

Sometimes Mother Nature has other plans. They will do the blowout and then the weather warms up and the hoped-for rain does not come. "You have to avoid desiccation," Warnick says."It's a real struggle with disease when the fields get dry."

He gets a double whammy since the winters are quite harsh, with wind chills in the minus-15 to minus-20 degree area. Snow falls only an inch or two at a time, meaning his fields are open and exposed to cold, windy conditions for much of the winter.

Minner notes that on baseball fields the mound and batters box areas should be reconditioned in the fall and then covered with a tarp for the winter. Worn areas in front of the pitcher's mound, and first and third bases, should be sodded in the fall so they are ready to go in the spring.

A bit controversial among sports turf managers right now is the need to aerify. "I'll do some aerification on severely compacted areas," Warnick says. "I like to slice it to get some oxygen in there."

Other turf managers will question that, saying that slicing or coring can cause the roots to die back. "I've never found it to be the case," Warnick says.



Given the time, he will pull cores to 2 inches deep. "If we run a vertaslicer, we will set it at three inches by three inches and core out on a 3-by-6 inch spacing."

Minner agrees with Warnick that aeration is worthwhile. He recommends using a hollow core unit and topdressing with onefourth to three-eighths inch of either sand or compost. "This is the best time to use a leveling drag to smooth out depressions and divots in the field," he adds.

Minner says solid tine aerification can be used during the fall season with minimal disturbance to the field. "Solid tines reduce surface hardness, increase initial water infiltration, and prepare holes for seeds to establish," he says.

His recommendation is to seed worn areas with two pounds of Kentucky blue grass per 1000 square feet and/or 10 pounds of perennial rye. The seed should be broadcast and then dragged into the aerifier holes.

If drilled, Minner recommends drilling the seed in multiple directions, or combining a drill with broadcast seeding.

Of course, it is best if divot mix and seeding are used as soon as bare spots develop. "This will usually occur after the first game," Minner notes, adding that pre-germinated seed that is not used on the game field can always be used on practice fields.

"Cover worn areas of the field," he adds. There is about 20,000 square feet between the hash marks of a typical football field.

Blankets for turf

Turf blankets are a great help for all sorts of sports turf, both as the grass goes into dormancy and as it comes out the following spring.

"In the early spring, the grass is firmly established up to three weeks sooner than uncovered," says Bob Curry, president of Covermaster. A greenhouse-like effect allows grass to breathe and retain the right amount of heat and moisture. The result is faster germination of newly seeded areas and deeper root development, Curry says.



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Unlike most other field blankets, their Evergreen blanket is made of a permeable material. It is a uniquely woven, translucent polyethylene with a patented lace coating. It is UV treated, rot and mildew resistant, and does not show significant wear or degradation by sunlight even after years of regular use, he adds. Blankets, in general, reduce the risk of winterkill, minimize loss of chemicals due to evaporation, and delay dormancy of grass in the fall.

"It's especially effective on golf courses to prevent wind-caused desiccation in the winter,) Curry says. At the Buffalo Bison's Dunn Tire stadium, they found that the retained heat encouraged good root development in the early spring when a late fall planting would normally not get off to such a quick start.

A blanket would be great at BYU-Idaho, but budgets interfere. A big challenge at BYU-Idaho is the wind and relatively open, but included with each cover. On baseball fields, sizes range from infield covers to full-field. Similarly, soccer, football and other field sizes can be accommodated.

At RFK Stadium in Washington, DC, when the Redskins played there, they put a blanket on the field every night in the fall and removed it the next day. That tricked the bermudagrass into not going dormant and saved them from having to paint the field. However, as a general rule, a good time to apply a winter turf blanket is about the time bermuda would start to go dormant.

"If you've overseeded or sodded, come spring be careful not to get the cover off too early," Curry says. That can result in cold shock on the new grass.

Many turf managers worry about the growth they see popping through the cover early in the spring. "A good idea is to remove

Minner recommends against using nonselective soil sterilant herbicides on skin areas to prevent weed growth. "It is likely that these materials will find their way into the surrounding turf areas and cause injury," he notes.

Other tips

Traffic control is a key factor in successfully managing any field. "Managing a football field requires coordination among the administrator, coach, band director, and grounds manager," Minner notes.

"Administrators should keep in mind that proper traffic control costs nothing in terms of dollars and at the same time offers the most effective means of reducing dangerously worn areas on game and practice fields," he continues.

This is one job where communications

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very cold, winter. That makes overseeding in the fall impractical. "I've overseeded at other places. But our winter and spring are so harsh that we don't overseed here. We're better served by doing it in the spring after the ground starts to thaw," Warnick says.

"I'd like to use a blanket," Warnick says, "but we can't afford it here. I would like to have one at the soccer goal mouths and for other early-spring sports, like the baseball infields and along the foul area near the dugouts."

Around soccer goal mouths and similar high-use areas, a blanket will give an overseeding a couple of days head start on recovery.

In the spring, there is payback, too, as it takes less time to prepare fields for play. There are always those spots where the turf is simply worn down more than others are. Turf under a blanket comes back better, allowing quick repair on those heavy wear areas.

Handling is easy, Curry says. Simply lay the blanket down and anchor it with the pegs the cover, mow, and then replace it, until temperatures warm up," Curry says.

Baseball fields

Many small colleges start baseball and softball practice as early as mid-February. Minner notes that the practices that work on football and soccer fields are generally applicable to baseball fields.

But some areas, like skin areas, are special cases and often are neglected. "Skin areas are often left to fend for themselves during the winter," he says. Strong winds will blow infield dirt into the adjacent grassy areas and can cause large lips to build up during the winter.

Boards or slit fences can reduce blowing dirt, Minner says. "Another simple method is to lay down 2x4 boards along the dirt infield and adjacent to grass where the lip usually starts to form. Lay the boards flat and stake them if needed," he continues. "Dirt piles up on the boards and is easily removed in the spring." skills, not agronomic skills, come to the forefront.

Minner also notes that pre-emergent herbicides, like pendimethalin, can be applied in late fall, following the playing season, to prevent early germinating knotweed that is especially troublesome in high traffic areas.

"Fall-applied, pre-emergent herbicides should not be used in areas of the field where turfgrass seed is used in the fall or spring," Minner warns.

Lastly, he notes that sod is often a better solution to fixing small wear areas. It is more expensive than seed, but gives an instant solution for worn goal boxes and spots between hash marks.

"Even if the sod doesn't thoroughly root down in the fall it will give you a jump on the spring season and finish rooting in the spring," Minner says.

Chris Harrison is a veteran writer who covers turf stories coast to coast.