



Baseball Field Maintenance

by Luke Yoder

Putting the baseball field to bed ready to play each winter is key to an early start in the spring. The typical opening day in Major League Baseball is April 1 to April 9.

Spring field preparations are aimed at producing conditions as near perfect as possible for opening day. Working closely with me toward that goal on the new Pittsburgh Pirates field are two topnotch assistants: Steve Erickson and Rich Hook.

Our new field spent the winter covered with an Evergreen tarp. In our spring start-up timetable, we planned to remove the tarp around March 1, weather permitting, and apply a starter fertilizer and micronutrients. We plan to leave the tarps off, though we may need to put the infield and foul area tarps back on due to a cold spell. Removal of the outfield tarp takes all day, so we'd like to avoid putting it back on.

We'll start up the irrigation system during early to mid-March, depending on the weather, and will water in the fertilizer. We'll do the first mowing between the first and fifteenth of March.

We set in the mowing pattern a week before the first game. We'll also apply the season's first infield top-dressing a week before the first game.



Grounds crew work on the field at PNC Park, which opened earlier this month in Pittsburgh

We check all the mounds, home plate and batters boxes to make sure the moisture content and packing meet our standards because they have been covered all winter. By March 25, the infield will be set, with all the infield clay graded out. We'll edge the field about three days before the first game.

Around March 20, we start watching the 10-day weather forecast to gauge the need to apply the big infield tarp. We monitor the weather daily

starting on March 25. We'll tarp if rain is forecast, taking a proactive approach to the projected weather conditions.

We monitor turfgrass conditions daily once the field is uncovered, pushing growth if necessary, but with caution not to push too hard. If we have a warm day in early March and soil temperatures in the 30s or 40s, we'll use our SubAir system to draw the warmer outside air into the cooler root zone to speed up growth.

continued on page 22

Find Out How TifSport's Superior Sod Strength Provides Improved Playing Conditions & Reduces Divot Injuries On Athletic Fields

www.tifsp@rt.com

THE NEW CERTIFIED BERMUDAGRASS STANDARD FOR ATHLETIC FIELDS, GOLF COURSES & HOME LAWNS

Circle 113 on Inquiry Card

One or two days prior to the first game we'll have everything ready to play except for the chalking. The lines will be painted in the outfield, the turf edged and mowed, the mound, plate, infield clay and warning track in top condition. In case of bad weather, we'll tarp the field so it will be ready for play when the tarp is removed. All that's left for that first game day is the basic mowing, and watering the infield if needed. If weather conditions have been okay, we just repeat game day preparations.

The Post Game Routine

Every night, after every game, we fix the field so, if it had to be tarped, we could just remove the tarp the next day and be ready to play. The only thing we don't do post game is the mowing. We repair the batters box, adding new clay and tamping. We repair the mound, both bullpens, the infield and the basepaths. We broom out the grass line edges to remove any clay from the turf. We



A member of the Pirates' ground crew rolls the sod along the firstbase line.

drag the warning track.

If needed, we would hand water only the foul territory and infield turf and run the irrigation system in the outfield. We would water the infield skin if no rain threatened. When we get to July and August, we would irrigate the turf nearly every night and hand water the infield skin.

We get the mounds, plates and bullpens game ready, then tarp them. We'll also monitor the weather and, if there's a 30 percent chance of rain or more, we'll put on the infield tarp. We use a combination of sandbags and 8-inch spikes to batten it down securely. If there's only a 20 percent chance of rain and less

than 1/8 inch of rainfall is predicted, we don't tarp.

Weather is so critical that we use multiple resources to monitor it: The national weather service and Weather Channel, Sky Watch Weather Center, and, when we're fluctuating in the 20 to 30 percent range, one-on-one contact with our weather service.

If the field is tarped, we won't set the irrigation for the outfield. If the field isn't tarped, we usually set a cycle of irrigation. We leave the ballpark around 11 p.m.

Daily Maintenance

If the field is tarped, we arrive at the ballpark between 6:30 and 7 a.m. to remove the tarp before sunrise. We remove the small tarps to check all the mounds and regulate the moisture levels. Even though the mound and plate are set, we go over them again to make sure they're in ideal condition.

We check the infield dirt. If it's firmed up too much, we'll go over it with a nail drag. Next we'll use a 3-foot-by-3-foot float board to move clay from high to low spots. We follow this by walk dragging all the infield clay with a one-mesh drag. Then we'll water it down, matching the amount of application to weather conditions—more if it's sunny, less if it's cloudy.



Tiftway Sports, Inc. with over 12 years of experience in athletic field construction and renovation. For your Turnkey Athletic field solution. Please call Today!



Tiftway Sports, Inc.
912-567-2380

Circle 114 on Inquiry Card.

We'll need to go inside to check the indoor mounds in the tunnels and, if repair is needed, do it in the morning. That's a task we don't do at night. If conditions are dry, as they are most of July and August, we'd also hand water the warning track to keep the moisture levels in balance. All the maintenance listed above usually takes up the morning.

Around noon or in the early afternoon, my assistants will walk mow the infield and mow the outfield with a triplex mower. Mowing takes about 1-1/2 hours. I'm still working the infield, watching the infield moisture and watering it as necessary, and may need to water the warning track again.

Around 1:30 p.m., we start set up for batting practice. We'll do one more drag on the infield to take out the mower wheel marks and will water it again.

During the 10-minute gap between batting practices, we may hand water the infield dirt again.

Our game crew arrives around 5 p.m. Between 6:15 and 6:20 they'll remove all the batting practice equipment from the field.

Pregame Field Preparations

We'll start the pregame field routine by dragging the basepaths, the home plate area and the infield skin. I'll start watering the infield skin. My staff will start chalking. To chalk a crisper line, we've constructed a 16-foot-by-4-inch stencil chalker that drops the chalk through a section of aluminum window screening when it's tapped.

We repair the bullpens, repacking them and checking the moisture levels. I'll check the home plate batters box and the game mound and water them as necessary.

By then it's time for the game to begin.

Working in Maintenance Procedures

At the end of a homestand (typically a four to eight day gap) or in the middle of a homestand, we'll concentrate on renovation and repair.

We try to fit in some infield work every four days to insure near perfect

conditions and avoid the need for major repairs. This may be reworking the first base area or one of the position spots, such as where the infielder stands, or the area where the players round second base. We sweep off the topdressing material and treat the area like a big low spot in the mound. We take the infield mix from a high

spot to a low spot, then use a float board to level it out by hand. We'll next use a one-mesh screen to bring that spot to finish grade, take a roller over it and water well so the material will bond.

We have no set irrigation cycle, constantly adjusting our system to fit



Great Fields Get Noticed.

Turfco offers you a strong team of turf building equipment. They're the fastest and most versatile equipment to let you build hardier and healthier turf. Your sports fields become safer to play on and become easier to maintain. Originators of Mete-R-Matic® top dressers in 1961, Turfco's professional equipment gives your field a look that gets noticed.

Pro Turf Edger

Special design makes it easy to follow any edge. Eliminates spade work around the diamond. Oscillating blade action cuts fast and clean. Leaves no mess or no thrown debris to clean up.



Economy Aerator

Now you can afford to breathe life into any sports field. This low cost, 62" aerator has no hydraulics or mechanical linkages for easy use and low maintenance. Hooks up to any vehicle in seconds.



Precision Top Dresser

Fast, uniform, versatile. Patented chevron belt lets you handle top dressing, lime, crumb rubber, gypsum, calcine clay, compost and even overseeding with precision. Level fields and amend soil consistently.



For details and the name of your local dealer, call

1-800-679-8201

Turfco Manufacturing Inc.
1655 101st Avenue Northeast
Minneapolis, MN 55449-4420

*Choice Performers,
Choice Fields.*

TURFCO

THE LEADER. SINCE 1961.

Circle 115 on Inquiry Card



A solid foundation is important to quality turf. Here, workers prepare the soil mixture on which the sod will be laid.

turf needs based on the amount of rainfall, temperature patterns and the amount of sun and clouds.

We'll use a 1-inch hose to blow out the lips with water. We may use the mound slope tool to check all our slopes and make any adjustments needed. We'll check the mound for cupped out areas and may dig out the landing area, or in front of the pitching rubber and put in fresh bricks. We'll clean up the clay in any areas where it appears to be getting contaminated.

We'll adjust our mowing, altering the mowing direction and maybe changing the pattern. We may overseed in the position areas, using perennial ryegrass during the season, and using Kentucky bluegrass in the post-season.

Approximately once a month, while the team is away, we'll core aerate using a 2-inch spacing and a depth of about 4 inches. We'll remove the cores and then topdress with straight sand to match our root zone sand. Our soil profile is about 80 per-

cent sand, 20 percent peat. With the sloughing off of all the roots, we'll

"We try to fit in some infield work every four days to ensure near perfect conditions and avoid the need for major repairs."

have enough organic matter in the profile. I feel using the mixed material will slow the percolation rate over time, so we topdress with straight

sand. Should there be any loss of organic matter, we could add the peat to the mix. We always use hollow tines to avoid creating any type of hard pan. In hot summer conditions, if we didn't want to open up core holes and aeration is necessary, we'll use the needle tines.

In mid April, we'll generally use a pre-emergent weed control over all the turf areas except those we may need to seed later, such as where the outfielders stand and other player position areas.

Our fertilization program is matched to turfgrass needs and adjusted based on turf reactions, soil tests and tissue tests. We monitor the general look and color of the turf, rooting levels and the amount of clippings. This will be our first season in Pittsburgh, so we're not yet sure on the timing. I may alternate between slow release granular applications and soluble fertilizer foliar fed. I plan to put down between 1 1/4 to 1/2 lbs. of Nitrogen per month. We'll cut back on N in July and August, applying just 1/2 pound of N each month. We'll

do most of the fertilization in the fall.

We'll apply fungicides as a preventative measure, looking for 15 to 30 days control in critical periods. We'll apply insecticide in July to keep the grubs away. Any other control products would be applied according to IPM practices.

We'll resod in front of the pitchers mound as needed, probably every one or two months. We'd also sod any other areas that may need it, such as around the plate and the outfielder spots. We can harvest limited sod from the bullpen area and have back-up sod availability from our original supplier.

End of Season Maintenance

Once play wraps up in the fall, we'll resod any areas that are questionable. This includes all areas we've reseeded with perennial ryegrass. We're careful to keep the perennial ryegrass contained in specific areas so we can bring the field back to total bluegrasses through resodding. We'll check for lip buildup and worn edges and will resod them at the same time we correct the lips.

In October, we'll vertidrain the entire turf area of the field, pulling 3/4- to 1-inch cores, 8 or 9 inches deep. We'll follow that by overseeding with a blend of different bluegrass varieties. Then we'll topdress with sand and drag it all in.

We'll apply at least a pound of nitrogen in September and October and 1-1/2 pounds of N the first of December. The last application is a dormant feeding that will be in place to start working as temperatures warm in the spring. We'll mow every other day until turf growth stops in November.

We'll remove the top 1 to 2 inches of the basepath and infield material and bring in fresh infield mix. We'll use a laser or string level on all the infield skin, and will float it out, screen it and roll it. We'll wait until spring to add any amendments. We'll also rework the warning track.

Then we'll rebuild the bullpens, pitchers mounds and batters boxes. We'll dig out the old bricks and put in fresh bricks, turn over or replace the rubbers on the mounds and replace home plate.



A view of the field, only halfway covered with sod

We'll also make any adjustments needed in our irrigation system. We may move heads, put in different size heads, move a quick coupler or take one out. In December, we'll blow out and winterize the irrigation system. Our goal is to have the field ready and playable by Thanksgiving.

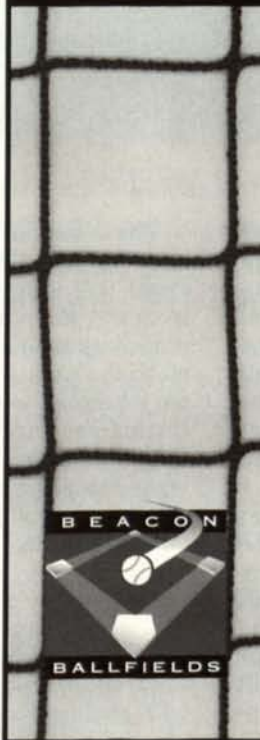
We plan to put on the Evergreen tarp again in mid December since the field is still so young and I want to insure early March green up to start the cycle over again.

Luke Yoder is manager of field maintenance for the Pittsburgh Pirates. He previously served as head groundskeeper for the Iowa Cubs for four years, earning The American Association of

Baseball Triple A Groundskeeper of the Year honors in 1996. He completed his BS degree in Turfgrass Management at Clemson University in 1994.

SAFETY & APPEARANCE

Netting, Padding, & Windscreen



Protects players, property, and the public. Beacon specializes in custom-made netting, padding, and windscreen systems for your facility. Beacon will custom design and fabricate a solution for your facility.

For more information, call 800-747-5985 or visit www.ballfields.com

Circle 116 on Inquiry Card.