Growing grass when it doesn't want to

That's what's going on at Soldier Field and the Bears' practice fields over the course of 12 months.

by Ken Mrock

As groundskeeper for the Chicago Bears, I have to manage turf that takes the hardest beating in sports turf. Over the past nine years, I've seen the demands on our turf increase dramatically. The players have become bigger and faster, and training is almost year-round. This is tough because the Midwest has such a short growing season.

If that weren't enough, consider aesthetics too. The Bears have about 10 television media outlets along with huge radio and print coverage. The integrity of the playing surface is always critical.

This past season we had five mini-camps, several twice-a-day practices in addition to our normal four practices per week. On top of this, the Bears share their training field with the Lake Forest College football team for five home games.

With this schedule, the field doesn't have as much time to grow grass. So what do we do? Punt? Kneel down with the ball? No way.

Assistant groundskeeper John Berta and I have put together an aggressive mix of seeding and fertilization together with a tight maintenance program to ensure Bears' ballplayers have the best possible playing fields.

It begins in March—Starting at the end of March, we pre-germinate seed—a mixture of Kentucky bluegrass, perennial ryegrass and *Poa supina*. As soon as the field is workable, we aerify with a Ryan GA-30 or Toro Greensaire. We bring up as many plugs per square foot as possible. This speeds germination and establishes the plant a little lower in the turf surface, somewhat protecting the plant from the cleats of the players.

We allow the plugs to completely dry. Then we broadcast the pre-germinated seed mix over the entire practice field and add another 7-8 lbs./1,000 sq. ft. of dry seed broadcast mainly between the numbers. This area is the most worn due to the short passing game of our "West Coast Offense" where three or four receivers line up between the hash marks and numbers, cutting and spinning their way up the field. With the receivers, of course, come the defensive backs and linebackers. This puts six to eight players in a small area.

Since we have no internal drainage and the practice field was constructed with Turface calcined clay, we have continued to apply Turface and our topdressing soil to the practice field with a Turfco Metermatic top dresser. We apply

this mix across the entire field then lightly drag all the material in with a draft mat. Then we fertilize with a starter fertilizer, usually Vicksburg Chemical's K-Power 13-34-12. It offers potassium nitrate for the established turf, quick release nitrogen that works well in cool soil, and phosphorous for seed germination and root establishment. Then we apply pythium control and cover the entire field with a frost blanket.

Spring mini-camp—Mini-camp hits in late April—three days of twice-a-day practices with about 80 players. I call this our opening day. Daily maintenance on the field is quite aggressive. Divots must be replaced after every practice. The ones that can't be "found" are replaced with a mixture of seed, topsoil and Turface.

In early May, we fertilize with K-Power 12-0-42 along with spot treatments for broadleaf weeds. A Kiffco B-140 water reel irrigates the field before dawn so that the plants are dry by evening. Under normal conditions, we irrigate about twice weekly, putting down ½-1 inch of water per application. By mid-June, we're putting down a half-rate of K-Power 12-0-42. This strengthens the field for the last two mini-camps.

Around mid-July, we take a break in practice scheduling and the team moves to the University of Wisconsin at Platteville for four weeks. Although it's a tough time for seed development, it's our only window. We aerify the turf in two directions, overseed, topdress and make another application of 12-0-42. Fungicides and insecticides can be used, but sparingly. We also do another spot spraying for broadleaf control, usually dicamba for knotweed and clover control.



Going gets tough—August is the toughest stretch of our turf management program. Our team is in training camp, two-a-day practices with 80 players. We mow daily after every practice, sometimes twice a day, to allow a light rolling. We maintain the turf at about 1½ inches with a Jacobsen Tri-King 84 inch reel-type. This is a lightweight mower and allows us to pattern the turf five yards in one direction and the next five in the opposite direction. The ballplayers like close-cut turf.

With cooler weather in September, we shift our fertility program to 18-3-18 with both quick and slow-release nitrogen. When the nights begin to drop to 35 F., we pull out the frost blankets to raise the soil temperatures. This really kicks in the fertilizer.

We also use our rain/snow tarps as needed, covering $140 \ge 65$ yards in seven sections that zipper together to form one solid tarp. Other than during a Bears practice or a college game, no rain or snow is allowed to accumulate on the practice field.

As the season progresses, we pump 4 million BTUs of heat via kerosene-fired heaters under the tarps to keep the field from freezing. The only time the field is uncovered is for practice during November and December and hopefully January—playoff time. The increased levels of potassium allow us to literally beat up this field, but it keeps getting up. In mid-November, we apply a full rate of 12-0-42 to take us through until the spring.

—The author is grounds superintendent for the Chicago Bears professional football team.