with nearly 90,000 participants hitting the fields on 240 event days, the Penberthy Intramural Sports Center at Texas A&M University in College Station, endures some big-time foot traffic. What the maintenance team does post-season is often the most important process in determining how good a playing field is during the season.

Penberthy is a 38-acre, multi-use sports complex. The complex features 12 athletic fields that host a wide variety of intramural sports, sport club events, physical education classes, general recreational and special events such as athletic camps and various state, national and international championship tournaments.

In order to deliver the best possible turf quality, the Department of Recreational Sports has a well-defined turf maintenance program, and a dedicated staff to execute the plan. The department maintains a staff of three full-time employees and nine part-time student workers who provide a high-quality grass surface for the students and organizations of Texas A&M University, predominately in support of the intramural and sport club programs.

Twice a year between seasons we work an aggressive agronomic program to restore the fields to the best condition possible before the next season. Our fields are predominately Tifway 419 bermudagrass. The process is virtually identical during the winter break, which is usually from the second week in December until the first of February and the summer break, usually early May through early June. The ultimate goal is to begin each season at peak condition.

With 12 distinct fields, proper planning is essential. We use a nine-step process for turf maintenance, moving each process through each field in sequence. With the equipment and staff available we can be at different stages of renovation on two to three fields at a time.
Step 1: Slice aerate the field with 6 x 4-inch blades. We will run it four different directions in order to get a preliminary disruption of the soil and slicing of the bermudagrass, stimulating new growth.

Step 2: Spike aerate with an aerator with 6 x 3/4-inch spikes for increased soil disruption into the rootzone.

Step 3: Deep tine aerate with 10- x 1-inch hollow tines. This reduces deep compaction and allows some improvement in the soil structure.

Step 4 (optional): Use a pasture renovator when severe compaction exists. This old farm tool allows us to cut 3 to 4-inch slits in the compacted areas to break up the most severely compacted rootzones.

Step 5: Verticut two directions to cut the stolons and rhizomes of the bermudagrass plant and promote thicker turf. It also helps reduce thatch.

Step 6: Sweep to pick up the clippings from verticutting and reduce the amount of organic material in the turf.

Step 7: Topdress with sand to a depth of one-quarter inch. Over the years of topdressing the field recovery time after a rain has decreased dramatically. Top dressing with sand also helps smooth the surface and when drug into the aerator holes helps improve the soil structure.

Step 8: Drag with a 10-foot drag mat to brush the sand in to the canopy and into the holes created by the aerators.

Step 9: Fertilize based on recommendations from the soil lab from samples taken from the fields.

Water management during the entire process is critical. We don't want the fields too wet before we start, but once we open the canopy
we find that deep watering helps the aerators penetrate better. We frequently include a deep water cycle after each step of the process.

After the final deep-watering cycle we will start mowing at 1-inch height, three times a week. Mowing at least three times a week thickens the canopy while less frequent mowing is less effective. We continue to water and fertilize at levels designed to get maximum root and leaf growth throughout the remainder of the summer.

This process is complicated by event scheduling as we do host several athletic camps and one major athletic department event over the summer. We also have some intramurals and smaller student events. We adjust our schedule so that the fields we have completed are sufficiently recovered when needed for an event. During smaller events we move to areas as far from the event as possible so we will not disturb our customers, and of course we must suspend operations during major events all together.

This is the process we use to try to get the turf restored to the same or better condition at the start of the year as it was the previous year. Sometimes it seems that the entire summer is not enough time to get it all done but somehow, year after year, the season starts and we are ready with the grass looking green and healthy when that first student steps on Penberthy to play. ■

Bob Marcotte is Turf Foreman for the Recreational Sports Department, Texas A&M University, College Station, TX.

---

**John Mascaro’s Photo Quiz**

*Can you identify this sports turf problem?*

**Problem:** Brown Purdue “P” around the entire perimeter of stadium

**Turfgrass Area:** Ross-Ade Stadium, Purdue University

**Location:** West Lafayette, IN

**Grass Variety:** Bermudagrass

---

**Answer to John Mascaro’s Photo Quiz on page 37**

John Mascaro is President of Turf-Tec International