Raking system makes infields smooth, safe

by Jack Simonds, contributing editor

From John Deere & Company comes a new line of attachments for its 1200 bunker and field rake system for baseball field maintenance. From Bill Chestnut, a marketing representative with Deere’s Golf and Professional Turf Products division in Ottumwa, Iowa, comes solid advice on finer grooming techniques for baseball field maintenance managers from Little Leagues to the big leagues.

Daily maintenance on the diamond’s “skinned” areas (the soil portion which forms home plate, the base lines and the area surrounding the pitching mound) goes a long way, says Chestnut, toward what he calls “the objective of consistency” which separates good playing surfaces from the mundane.

“We’re finding that not much has been done for this area of the industry in a number of years,” says Chestnut. “Part of solving some of the problems is simply through education.”

Skinned areas, he says, should be maintained daily for firmness, resiliency and uniformity of footing. One primary goal: player safety.

“When people slide into base, they shouldn’t be pulling muscles or breaking bones. A poorly maintained field can hurt a career and that is an opportunity gone,” says Chestnut.

Field condition a deciding factor

Field conditions (infield, skinned and outfield) can have a lot to do with the outcome of the game, Chestnut maintains.

Skinned area maintenance tips from his play book include light daily watering, timely repair of low spots and frequent break up of the surface soil.

The typical skinned area — with a composite soil of 80 percent sand and 20 percent calcified clay — has “a fine pristine finish that looks absolutely smooth,” by Chestnut’s standards.

Scarify (soil loosening) to a recommended half-inch depth and follow with a pass with a homemade drag or Deere’s field finisher in swirling loops. Reverse the direction each time, he recommends.

Chestnut also warns about the potential of a lip buildup along the edge of skinned base line; a problem caused when dirt is pushed into the grassy edge time and time again.

A lip — a prime example of poor maintenance — actually can hamper the game. A low line drive, for example, could strike the lip, causing a quirky hop. Where the ball lands could be either comic or tragic.

Corrective action includes a stiff sweep with a bristle broom or high pressure hose or hand raking. If a lip has formed, it can be taken out with a sod cutter.

Drifting back to the outfield, Chestnut prescribes soil aeration at least once a month to curb possible formation of a compaction layer 3 to 5 inches beneath the surface.

Tips include light daily watering.

Compaction problems

Compaction leads to a host of problems including depriving grasses of water, fertilization and oxygen and poor root development.

In high play areas, he recommends deeper, longer aerator punctures from time to time. Deere’s new system includes a slicer/corer and shatter aerator for this circumstance.

General mowing rules also apply both for the infield and outfield. Never, for example, take off more than one third of the plant. More severe mowing, says Chestnut, risks “throwing the field into shock.”

Outfield grass blade length ranges from 3/4-inch to 1/4 inches; the infield, 1/8-inch to 1/4 inches.

Fertilizing? He sees slow-release fertilizing systems as best; eliminating the need to spray.

Deere’s new attachment system — 2 1/2 years in research and development — offers a 60-inch front aluminum blade which can perform finishing chores and also push off stands of water in the outfield.

Other attachments include a core removal blade for use after aeration, wide and narrow scarifier tines which can be modified to a 60-inch width with wide or narrow cutting intervals and five depth positions, a 60-inch field finisher screen and a slicer blade aerator. The system is now on the market.

Chestnut says the Deere system can treat the average skinned area in 20 to 30 minutes initially and in about 10 minutes between games.

With other features and including the base drive machine, a “ballpark” package price for the entire system is about $10,300.