QUALITY BASEBALL DIAMONDS COME FROM CARING

Holy Cross crew prepares Fitton Field for a tournament.

t's the bottom of the ninth inning at Heritage Park in Albany, NY, with the score tied. The Albany-Colonie Yankees have their best bunter at the plate and their fastest runner on third base. Field manager Tommy Jones and groundskeeper John Liburdi have been waiting for this moment since the beginning of the season.

RUG & CARPET

The batter lays a bunt down the first base line as the overflow crowd of 7,000 fans rise from their seats screaming for the ball to stay fair. Liburdi and his crew go crazy as the ball stays in play and the winning run scores. Tonight they helped the Yankees win a big game.

As the happy fans leave the park and Liburdi and his crew begin two hours of field clean-up, Jones winks as he passes Liburdi on his way to the locker room with the rest of the team. Only they know the basepath 14 sportsTUBF between home and first was sloped slightly toward the pitcher's mound before the game because they knew the Yankees had a good bunter and their opponents didn't. A little extra effort from the field crew combined with the skill of a good bunter put another game in the win column for the team.

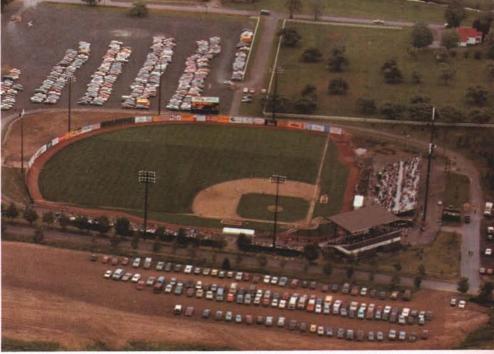
Liburdi strongly believes that the work he and his crew do at Heritage Park plays a part in every win by the double-A Yankees and the Albany-area amateur teams that use Heritage Park as their home field. They do all they can to gain the "home field advantage" by using every allowable trick in the book. To him, that's what baseball field management is all about.

Jim Long at Holy Cross College in Worcester, MA, takes a more practical view of his job—that a quality field is the fairest surface for two teams to compete on. Long doesn't have time for tricks—just high overall standards. Part of the reason may be that grounds superintendent Long, athletic field foreman John Grosnihan and his assistant Guy Durocher have more than 30 acres of sports turf to maintain to Holy Cross standards. These standards are set largely by college president Rev. John E. Brooks and by Edward Bennett Williams, chairman of the Holy Cross Board of Trustees and owner of the Baltimore Orioles.

The high quality of Holy Cross' Fitton Field is the same as that of the entire campus landscape, carefully guarded by Brooks and maintained by Long to win the respect of both students and alumni. The campus has previously won more than eight awards for landscape maintenance and design.

Despite their differing approaches to base-





Aerial view of Heritage Field, built and managed jointly by the Town of Colonie and the city of Albany.

As winners of the Baseball Diamond of the Year Award, Liburdi and Long willingly share of their knowledge to help other sports turf managers achieve high standards of performance, appearance and safety for their baseball fields.

ball field management, Liburdi and Long were both winners in the first annual Baseball Diamond of the Year Award sponsored by Partac Peat Corporation, the Sports Turf Managers' Association and *sportsTURF* magazine. They willingly share of their knowledge to help other sports turf managers achieve high standards of performance, appearance and safety for their baseball fields. The differences between the fields give a broad range of choices for quality baseball field management.

Heritage Park was built in 1983 and is operated under a 50:50 arrangment between Albany and the town of Colonie. "Revenue from the park does not go into a city general fund like in some stadiums," states Liburdi. "All accounts are separate so we can use income generated during the season to pay for our budgeted expenses. My job would be much harder if I had to go to the city for everything I need." At the end of the year Albany and Colonie either split the surplus or reinvest it in the park.

During the '86 baseball season, more than 320,000 fans paid to see the Yankees play – a record for the Eastern Conference. Liburdi hopes to expand the stadium's seating capacity from 5,700 to more than 10,000 with the surplus from 1986. Last July more than 16,000 fans packed into Heritage Park to see Ron Guidry pitch for the Yankees while recovering from arm injuries.

Backed by a stadium maintenance budget of more than \$160,000, Liburdi strives to keep Heritage Park the best field in the Eastern League and the fifth best in all the minor leagues. It has all the components of a professional stadium. A fully-automatic Toro 680 system irrigates the dense stand of Kentucky bluegrass, ryegrass and fine fescue. The warning track and infield have been constructed and groomed to major league standards. More than 150 lights, totalling 245,000 watts, illuminate the field and stands for night events. A 48,000-watt computer-operated score board and message center sits above the left field fence, a donation from the Miller Brewing Company.

Although the stadium is open nine months a year, you can find Liburdi there nearly every day. He begins his turf management program in the spring as soon as the snow melts by aerating both infield and outfield with a tractor-drawn Dedoes drum aerator with halfinch hollow tines. As the cores dry, he detatches the aerator from the tractor and connects a harrow to break up the cores.



More than 16,000 fans packed Heritage Field to see the recuperating Ron Guidry pitch.

Quality Baseball Diamonds continued from page 15

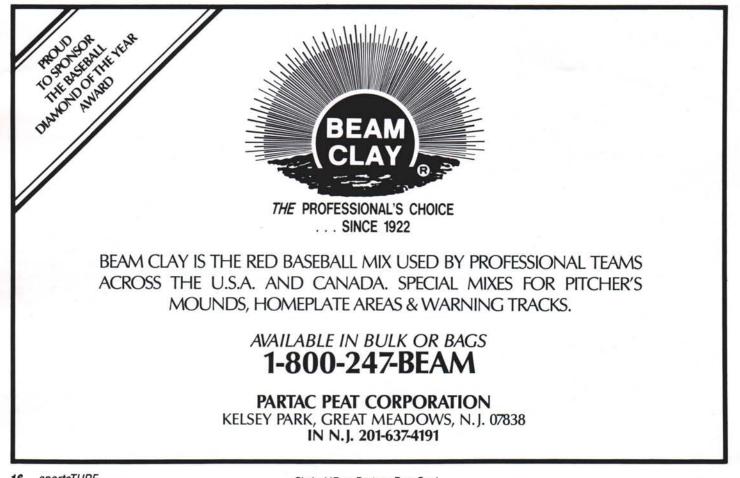
The following day he again uses the tractor with a Lely spreader attached to lightly topdress the infield with sand. Finally he spreads granular preemergence herbicide and wetting agent. "I've saved lots of money by using a tractor and attachments instead of individual pieces of equipment for each job," says the thrifty Liburdi.

Using a soil test kit he bought for the park, Liburdi tests both the infield and outfield soil once each month for nutrient levels and pH. The backbone of his fertilization program is a 24:4:12 fertilizer containing slowrelease nitrogen in the form of IBDU. He makes a second application of the fertilizer in mid-June and a double-rate application in October. He irrigates immediately after each application. "I've noticed earlier spring greenup and better root depth since we started using slow-release nitrogen and kept a close eye on phosphorus and potassium levels," states Liburdi.

One reason he switched fertilizers was almost two inches of thatch that built up after the sod was two years old. "Thatch messes everything up," he recalls. "Not only does it make the field too soft, it forces you to irrigate more than you should have to. The soil would be moist but the turf would be dry as a bone. It took three men three days one fall to mechanically dethatch the field and get rid of the debris. I decided that was enough."

Liburdi called up Norm Hummel, turf specialist at Cornell University, and asked for his advice. That's when he purchased the aerator, switched over to slow-release nitrogen and started using a wetting agent. "Not only did the thatch problem stop, we use less water, less fertilizer and the grass roots are deeper," says a relieved Liburdi.

Aeration is discontinued until the peak crabgrass germination period is over in June to prevent breaking the herbicide barrier in the soil. From June to November the field will be aerated an average of twice a month. The aerator is brought out after each nonsporting event like a concert or flea market to relieve any resulting compaction. After the first June aeration, Liburdi makes one



Circle 117 on Postage Free Card

application of Oftanol insecticide to control white grubs.

You start to see the finicky side of Liburdi when you ask him about mowing and infield preparation. The importance of the infield becomes apparent immediately.

The outfield is mowed three times each week with a Jacobsen Trim King riding reel mower. Although the clippings are left on the field, they are left there by design. Liburdi calls it the clock system of mowing. On Monday, the outfield is mowed from north to south. On Wednesday the direction is changed to east to west. Finally on Friday, the outfield is mowed from northeast to southwest. The result is a checkerboard pattern which makes the outfielders feel like they are standing on a golf green.

The clock system is also used on the infield with a walk-behind rotary with "razorsharp" blades and grass catcher. "It's like parting your hair," says Liburdi. "You part it the same way all the time and it lays down automatically. We want the turf to grow as upright as possible."

Many baseball field managers will tell you the skinned area is more important than the turf.

One way he doesn't want the turf to grow is into the skinned area. That's forbidden territory for grass, weeds and rocks. The skinned area is one area so important to Liburdi that he bought a specialized piece of equipment for it, a Smithco infield machine. The machine is similar to a sand trap groomer with modifications to handle clay base path mixes.

Many baseball field managers will tell you the skinned area is more important than the turf. To them, selecting a base path mix is more critical than selecting a seed mix. Liburdi goes so far as to use different mixes for different parts of the skinned area.

Actually the word "skinned" doesn't fit these areas. After the field is graded, the local soil in these areas is removed to a depth of six inches. Drain tile are installed along the bottom of the excavated areas before the base path mix is added.

At Heritage Park, a carefully-mixed combination of sand and clay was used in the six-foot-wide base paths. Two inches at a time of the mix were spread, wet down and rolled. A similar procedure is necessary for any holes or ruts made by players during a game. They have to be filled, wet down and packed. If that isn't done, the mix in the hole will dry out and become loose before the surrounding mix.

Each year Liburdi rototills Terra-Green soil conditioner into the top two or three inches of the base paths to renew their texture, stability and moisture-holding capacity. A good base path mix retains enough moisture to prevent dust, is firm enough for solid footing and a true ball bounce, is free of rocks and easily workable for grooming.

The soil mix in the pitcher's mound and batter's box receives even more attention. The mound is tricky because pitchers can be easily distracted by an uncomfortable landing on their follow-through after a pitch. "The first thing most pitchers do when they get to the mound is dig out push-off and landing spots with their cleats," remarks Liburdi. "You give them a good, solid mound and they don't need to dig holes." To make his mound solid, Liburdi replaced the soil in the front half of the mound with Beam Clay pitcher's mound mix. The special clay mix provides the extra firmness pitchers like, says Liburdi, and has reduced the amount of time his crew has had to spend on repairing the mound after games.

Batters also need to feel comfortable about their footing when at the plate. They like to work their cleats into the dirt as they get into their stance. A larger particle size

continued on page 19



Quality Baseball Diamonds continued from page 17

of clay mix called Home Plate Mix is used by Liburdi in the batter's box.

Stone dust is Liburdi's choice for the warning track and coaches boxes. This byproduct from rock quarries is inexpensive, retains moisture well and discourages weed or grass growth. It grooms easily and looks good.

One thing Liburdi works very hard to avoid is accumulations of base path mix in the turf areas called lips. He does not allow the crew to operate the infield machine to the edge of the turf areas. Instead, his crew hand rakes the edges to keep any mix from getting on the turf and then uses the infield machine. Between games the skinned areas are packed with a 650 roller.

Part of the trick of making a baseball field look sharp for a game is protecting it during pre-game batting and fielding practices. After the field has been prepared and marked for a game, Liburdi covers the mound, the batting cage area and batter's box with specially-shaped pieces of TerraCover, a fabric cover that absorbs much of the weight of players standing on it. Nylon netting is placed in the fungo area between the mound and the plate. The netting prevents hard-hit grounders from making divots in the infield turf.

After batting practice, the cage is moved off the field, the covers are removed and



John Liburdi with Baseball Diamond of the Year trophy.

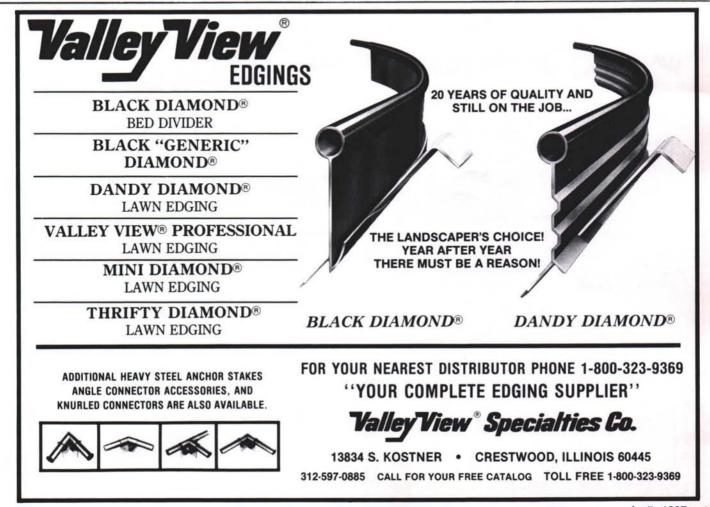
the lines and mound are quickly touched up. "We've cut our pregame preparation time in half," says Liburdi. "It gives us more time for other things that might go wrong at the last second."

Liburdi gives the same amount of care and attention to the field for 20 college and high schools and 15 Babe Ruth and Little League games each year as he does for the Yankees 70 home games. Each year the park hosts four baseball camps for children. Early in the season, Liburdi invites sports turf managers from area schools and leagues to Heritage Park for free educational seminars on baseball field management. "What we do at Heritage may not be practical for non-profit leagues to do to their fields," admits Liburdi, "but it gets them started in the right direction. Lots of times, they'll call later to ask more questions. That's a good sign in my opinion."

Holy Cross' Fitton Field is a New England sports landmark. Built in 1905, the field was used frequently by the Boston Red Sox and the Boston Braves for exhibition games. In the early days, residents of Worcester saw baseball greats such as Babe Ruth, Casey Stengel and Jimmy Fox play at Fitton Field.

The Red Sox don't play exhibition games there anymore, but for the last two years Holy Cross has hosted the Eastern Collegiate Athletic Conference Division One Baseball Championship and the New England High School Championships. More than 100 events are played on the field every year, including all home games for the college's freshman and varsity baseball and soccer teams. Fitton Field continues to earn its reputation as a New England sports landmark.

The site of the field was originally a marsh continued on page 20





Babe Ruth used to play in exhibition games with the Red Sox when Fitton Field was young.

Quality Baseball Diamonds continued from page 19

bordering the Blackstone River at the base of Mount St. James. To help Holy Cross turn the marsh into baseball field, a nearby steel company filled in the marsh with cinders from its large coke ovens. Although the cinder base of the field provides excellent drainage most of the season, the field is often flooded during the spring when the snow cap on Mount St. James melts. Spring baseball games were frequently cancelled due to the muddy state of the base paths. Summer heat would kill large patches of the Kentucky bluegrass and fine fescue turf since irrigation was never installed. In the fall, the field is used as a parking lot during football games.

With 175 acres to maintain, Jim Long sees himself as a generalist. "I can't drop everything else to concentrate on the field," he remarks. Faced with the problems inherent in the field and the high expectations of President Brooks, he had to act. The first



Players Ask For Natural Turf Give them... PRESCRIPTION ATHLETIC TURF SYSTEM PRESCRIBED Suction Pumping Exact Standards Moisture Sensing Installed By a License Automatic Subirrigation PROVEN PRACTICAL In pro, university, high Flat Surface school fields. The BEST in Water Management FOR FOOTBALL, BASEBALL, Never Muddy **Tolerates Frequent Use** SOCCER. INTRAMURALS Plan for the BEST Including a 2-year Advisory Service Write for literature & list of licensees: **Turfgrass Services Inc.** 643 N. Sharon Chapel W. Lafayette, IN 47906 317/743-9477

317/743-9477 W.H. Daniel

Circle 114 on Postage Free Card

step was to assign John Grosnihan and Guy Durocher the job of improving not only Fitton Field, but all the intramural fields on campus. One by one the problems with the baseball field were corrected.

The traditional sand/clay mix was excavated from the base paths and pitcher's mound down to a depth of six inches. Stone dust was installed in place of the old mix. Immediately drainage of the skinned area improved. There was no more mud to contend with and weeds that used to grow in the old base path mix did not develop in the stone dust. Maintenance is now simply a matter of grooming with a Toro Sand-Pro, light rolling and hosing. Maintenance time of the base paths was cut from 24 man hours per week to four.

"We can have the field back in play within hours of a rain storm now," says Long. If a game is interrupted by a short shower, Grosnihan applies Diamond Dry to the base paths before letting the players back on the field.

To restore dense turf to the portions of the field compacted by fall parking and torn up by winter soccer, Long has the crew aerate heavily with a Ryan Trac-Aire. A Rogers seeder is then used to verticut and overseed both infield and outfield. Starter fertilizer is applied and the turf topdressed with screened loam.

The only missing ingredient was water. Instead of installing permanent irrigation, Long opted for a water cannon by Larchmont Engineering. Not only did the travelling sprinkler make the renovation a success, it is now used regularly throughout the season. The crew also uses the cannon to wet down the base path mix.

One of the steps toward treating the field more like high maintenance turf than utility turf, was a greatly increased fertilizer program. Now the field is fertilized six times from May through September. Preemergence herbicide is applied twice in May and a postemergence dicot weed killer is used in late June.

The difference in the field is dramatic. After the outfield is mowed with a Jacobsen Turf King reel mower and the infield with a 24inch walk-behind rotary, Long adds a special touch of his own. He picks up the clippings and gives the turf a checkerboard pattern with a Toro Rake-O-Vac pulled by a small diesel tractor. "I don't believe in tricks," says Long, "but the vacuum comes pretty close."

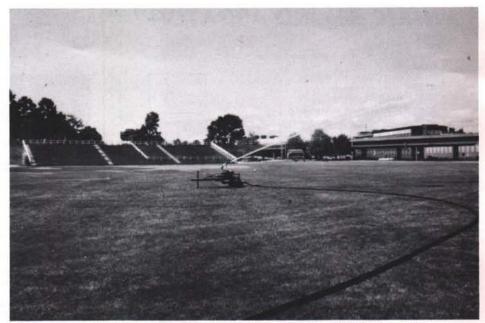
The Holy Cross crew considers some of the "tricks" as standard practice. During batting practice the mound and batting cage area are covered with green carpet to protect the dirt and markings. Lips in the turf are removed each spring. Four times a year the field is aerated to keep the surface open for drainage.

It's a boost to Long and his crew to have the support of Edward Bennett Williams, owner of the Baltimore Orioles and chairman of the Holy Cross board. "Mr. Williams takes special interest in Fitton Field," says Long. "He likes to visit with the crew and



Heritage Park installed a Toro irrigation system when the field was constructed in 1983.

Fitton Field still does not have lights. To add lights might in some way break an important link with the past that sets the 81-year-old field apart from others.



The condition of Fitton Field has improved greatly since Long started using a water cannon.

walk the field when he's on campus for board meetings. His interest in baseball rubs off and he encourages us to make the field as good as possible." Maybe it's the thought that Ruth and Stengle once played on Fitton Field that draws Williams to field after board meetings.

Today, the field meets the same high standards as the rest of the Holy Cross campus. Fitton Field still does not have lights. To add lights might in some way break an important link with the past that sets the 81year-old field apart from others.

Both Heritage Park and Fitton Field are important parts of their communities. Both Liburdi and Long understand this and make the effort to preserve the quality of their fields through maintenance. That's what made them the first winners of the Baseball Diamond of the Year Award. ®