

## STONE DUST—AN ALTERNATIVE TO TRADITIONAL CONSTRUCTION AND MAINTENANCE OF BASEBALL FIELDS

by

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Before deciding on the traditional mix of sand, silt, and clay for the skinned area of a baseball field, grounds managers may wish to investigate the alternatives. The Holy Cross grounds department took this course six years ago and the result was our change to stone dust. This material is a by-product of crushed stone and is available at any sand and gravel company. We chose a granular, sand-like consistency that is almost white when dry and dark grey when wet. After six years of excellent experience with stone dust, we used it again this past summer in the construction of a combination women's varsity softball and intramural field.

Many factors led us to think in terms of new materials. Consider the **disadvantages of the traditional mix:**

1. Promotes weed growth-herbicides leech into grass area.
2. Grass encroaches into skinned area-requiring frequent edging.
3. Poor drainage-muddy conditions forced game cancellations.
4. Maintenance time-four men and five to six hours for game preparation.

In contrast, stone dust does not support vegetation, thus eliminating the need for herbicides, weeding and frequent edging. Drainage is excellent. The stone dust is completely dry the day after a rain. Maintenance time has been cut considerably. Field preparation now takes two men 2 1/2 hours on the morning of a game. And, I might add, the initial cost was much less than that of the traditional mix.

The only disadvantage we have found with the use of stone dust is that it can become too dry. Watering down and rolling once a week eliminates this problem.

In compliance with the Title IX policy, and with the increasing growth of women's athletics, our athletic schedule has doubled in the last few years, with many of our facilities receiving multiple use. Maintaining the quality of our playing fields under these conditions was, understandably, a matter of concern. The low maintenance requirement of stone dust has been a big factor in helping us meet these demands without losing the quality of our fields.

This past summer we undertook the construction of a combination women's varsity softball and intramural field using stone dust. We began by surveying, lining out and staking the area according



to regulations. We used lime to mark the base lines, skinned area, and pitcher's mound. We then stripped all the sod. It had been our original intention to excavate the skinned area to a depth of three feet and fill in with a two-foot pea stone, and a six inch layer of stone dust, but after digging down 18 inches, with a backhoe, we found a good drainage material of cinders that had been used as land fill. Modifying our plans to meet the situation we filled the excavated area with 12 inches of round edge pea stone topped with six inches of stone dust. We started with the pitcher's mound, then moved to the base lines, working our

way around the bases. A gravel ramp was built for trucks and machinery to drive in and out of the area without disturbing the edges. The layer of pea stone was rolled and packed tightly, watered down, and left to settle for a few days before we brought in the stone dust. The same rolling and watering procedure was followed with the stone dust. The pitcher's mound, home plate and the base lines had to be filled by hand. All measurements were rechecked upon completion.

The compaction around the outside perimeter of the field, caused by the heavy equipment, was loosened by aerating, then the grass was limed, fertilized, seeded where necessary, and watered.

A new, regulation size, back stop was added and vandal-proof benches were installed.

The entire project was finished in two weeks by two members of the grounds crew with the help of four students and four Neighborhood Youth Corps workers.

The new ball field will not be used until early spring. Maintenance of the skinned area will then be a simple matter of two men, before each game, painting the bases, homeplate, and the pitcher's mound, using a Toro sand pro to loosen the stone dust, then dragging it with a screen. Watering and rolling are required once a week, and edging, once a year.

If the teams are playing away from home for long periods of time we can forget about the skinned area until the morning of the next game. With the traditional mix, daily maintenance was required to keep Mother Nature from reclaiming the skinned area.

It has, therefore, been our experience that, through the use of stone dust, the appearance and quality of our baseball field has greatly improved, while maintenance costs have been cut by more than half. Such a combination, in this day and age, makes stone dust a material well worth considering.