“Skinned Area Mixes”  
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There are few scientific publications on soil choice but there are numerous articles written in the popular press (Sports Turf, Landscape Management, Athletic Turf etc.). Choice of soil material for skinned and mound areas would appear to be based upon personal choice but there are some selection guidelines available in books like “Sport Fields” (Puhalla, Krans and Goatley, 1999). They suggest a mixture of about 60% sand, 20% silt, and 20% clay.

There are many factors to consider when selecting a mix. Can the area be covered? How much use does it get? Some of the municipal fields that have no capacity to cover may use more sand in the mix to encourage better drainage, while collegiate and professional mixes may have higher clay contents to produce faster surfaces. Mixes with more than 20% silt may cause problems if the surface can’t be covered. These mixes will not dry out as quick and may become “slick”. Calcined clays or diatomaceous earth products may also be used in some mixes as a soil conditioner. With regard to analysis, if these products are used in a mix and the particle sizes are smaller than 2mm, they can behave like a sand during physical analysis and become impossible to quantify.

In relation to the numbers of field managers that get their material tested, Dr. Norm Hummel has some points to make:

“Sports Field Managers typically do not test their ball diamond mixes. Much in the selection of mixes I think is by word of mouth. We test maybe 20 samples a year, which is a very small number when you consider the amount of mix sold. When we test a ball diamond mix, we do make recommendations for particle size. In fact, I am on a committee in ADTM that developed guidelines for construction of skinned areas of ball diamonds, so I am privy to the particle size guidelines that will soon be a national standard. We have a test we call “Ball Diamond Mix Test”. This includes a particle size analysis and color (from a Munsell Color chart). The cost is $85/sample. Continued on next page…………………

Murphy’s Law  
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Question: The soccer fields in our area are currently dormant, brown and dry as a bone. If these conditions continue can permanent or excessive damage to the turf result from typical play on the fields?

Answer: Absolutely!

Dormant turf has very low vigor. Dormant turf has prepared itself to survive without water; but not to withstand intense traffic. Thus, the low vigor of the dormant turfgrass plants will only be able to tolerate a very limited amount of traffic.

Signs of severe damage include thin open turf and bare soil. The lower leaf sheaths and crowns of the turfgrass plants have been and will continue to be damaged once you start to see bare soil in the playing field. This is a serious problem because regeneration of new healthy shoots and roots come from the crowns. Dead crowns translates into dead grass with no hope for recovery (I can not word it more bluntly)!

If you can still find crowns as a fresh, translucent green appearance, then the turf can recover. Dried up, brown crowns are severely damaged and have a high probability of being dead. Weed invasion is another problem with intense use (traffic) under dormant turf conditions. The dormant turf wears out very quickly with use. Once natural rains return or irrigation is applied, the dormant weed seeds in the soil have ample opportunity to germinate, emerge, and infest the field. Thus, you will likely observe greater weed problem on fields that receive significant play (use) under dormant conditions. ▲