

## TOPDRESSING PROGRAMS ON GREENS

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Several studies have been underway on greens at the Hancock Turfgrass Research Center. The earliest begun in 1982 to evaluate the effect of rate and frequency of sand topdressing on a Penneagle creeping bentgrass green. Two rates of nitrogen, 3 and 6 pounds per 1000 sq. ft annually have been applied. The higher N rate causes a greater wilting tendency. Syringing is necessary to prevent turf loss and development of localized dry spots. The soil level has been built up by the topdressing programs. When topdressing with sand alone, one must follow the program of light and frequent applications regularly. The suggested program is to apply 2-4 cu-ft of sand every 3 weeks or so, but this should be adjusted for growth rate and wear effects. As grass grows more rapidly apply sand more frequently. As traffic becomes more intense during heavy play, follow longer intervals between applications.

A study to evaluate Sand-Aid as an amendment in greens management was initiated in 1985. Treatments include applying Sand-Aid with topdressing sand or at the time of coring. Quality ratings taken periodically have shown no difference on some dates while on other dates, Sand-Aid treated plots have ranked somewhat better than untreated plots. Soil tests for potassium and magnesium have increased with Sand-Aid applications on sandy soils, but there were no soil test differences for the green on native soil. These studies will be continuing as we evaluate effects on stress, rooting and turf quality.

In 1986 a study was initiated to evaluate the addition of peat or peat and soil to sand for topdressing Penncross greens. As with the Sand-Aid study the hypothesis is that addition of some organic matter will improve the nutrient status and water holding capacity of sand used in sand topdressing of greens. Ratings taken in 1986 suggest that on some dates during the year the use of an 80 sand/ 20 peat or 60 sand/ 20 peat/ 20 soil (by volume) resulted in higher quality turf than where sand was used alone. Since these materials are added with the sand, benefits will likely be observed only after a few years as the soil begins to build up. While a proper soil based mix is considered optimum, the difficulty in providing a uniform mix from one batch to the next is very difficult and is accomplished by few. Thus the use of peat or other organic amendments is considered an alternative to straight sand.