SUMMER BERMUDAGRASS RENOVATION VEGETATIVE VARIETIES

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Heavy fall and/or spring traffic on bermuda sports fields often increases winterkill or destroys considerable turf in high traffic areas. The damaged turf must be repaired in May or early June in order to obtain high quality turf by late August. The first step in repair is to fill depressions (that hold water) with additional top soil, sand or a soil-sand mix. The second step is to replant the bermuda. We have some new, coarse-textured bermuda varieties that can be established from seed. In order to maintain consistent appearance and quality, however, you should replant with the same vegetative bermuda as originally established. Consider the following methods for replanting vegetative varieties:

(A) **Sod.** This is the quickest method of repair. After sod is laid (sometime between May and late August) play can begin in two to three weeks. Sod of Quickstand or Vamont will likely cost \$2.00 to \$3.00 per square yard, plus the cost for transportation and installation.

(B) Sprigging.

(1) The damaged areas can be tilled with a disk or roto-tiller and resprigged by broadcasting sprigs over the surface. Light disking can be used to incorporate the sprigs within the top 0-2 inches. After planting, intensive irrigation is required for the first couple of weeks. With proper irrigation, weed control and fertilization, a good field should be available for mid-August play. However, when using this method in the center of a field, the tillage will tend to reduce the field crown and destroy hardy plants that did survive the previous winter. In other words, you start from scratch each year, and within a couple years the field crown becomes very flat.

(2) Bermuda sod producers can be hired to row plant sprigs without tillage. This is probably the best method for large sites, with lots of bermudagrass injury. This method will protect the crown and certainly protect any live bermuda that has survived.

(C) **Sod Patching.** For small areas such as goal mouths, bench areas and areas between hash marks, this is by far the cheapest and quickest method of repair.

(1) In late April or May, aerify the field with a good open-spoon/hollow-tine aerifier. With a pull-type fairway aerifier, it is often necessary to traverse the field several times to get 15-20 holes per square foot. The main purpose is to penetrate through the compacted surface and to redeposit soil on the surface in order to increase soil surface contact with the sod pieces.

(2) Purchase/rent/borrow a sod cutter. Remove sod from an area of the field with good bermuda recovery. Almost always, the field corners from the hash marks to sidelines and within the 20-yard line, will recover. In-zones that are planted to bermuda will also recover.

(3) Adjust the sod cutter so that it cuts between the bermuda sod and the soil surface. Although this thin-cut sod will not roll like normal sod with soil, it can be easily picked up with pitchforks or manure forks. Just fork it into a truck and move it to the damaged turf area. NOTE: Because of surface roughness, the sod cutter will often pop out of the sod for a few inches. This causes no problem. The important thing is to remove a minimum amount of soil with the sod. The area from which you remove the sod will grow back very quickly, usually within about three weeks.

(4) By hand, throw/place the sod pieces, green side up, into the bare areas. If sod pieces are too large for some bare areas, tear them apart. Pieces the size of a hand establish very quickly. You do not need to completely cover the soil since bermuda will spread very quickly. Six inches between sod pieces should be no problem for a summer's re-growth. Even sod pieces placed on top of weeds or other bermuda will usually establish. Sod pieces with ½" or more of soil attached should not be used since it will increase the surface roughness after establishment.

(5) IRRIGATE!! Immediately start the irrigation system and completely soak the surface. With a good automatic system, you can set the clock to water about 10 minutes for each zone, and keep rotating zones for a day or two. After the field appears to be very wet, then adjust the clock to apply about 10 minutes of water every two hours during daylight. No water is necessary at night. Without automatic irrigation, it is necessary to irrigate almost continuously during daylight hours for several days. NOTE: Since the sod pieces have little or no soil and sometimes are elevated on top of other grass/weeds, they can quickly desiccate. Do not let them dry out for the first week or so. Once the roots begin to tack down, reduce the irrigation frequency. (6) Even with plenty of moisture, the sod pieces will go off-color for a week or more. Long, white roots should develop within a week and the leaves should develop some new green color within two weeks. You can then reduce the irrigation frequency to one or two times per day. After about three weeks, turn the irrigation off and let the field dry so that equipment can be used to fertilize and mow. When sufficiently dry, mow all undisturbed sod areas but skip the sod pieces if the mower tends to dislodge them from the soil. You should be able to commence mowing the repaired areas in about three to four weeks from planting.

(7) As soon as green-up begins, fertilize with about 1# N per 1000 square feet. This is equivalent to about 3# of ammonium nitrate (34-0-0) or 2 ½# of urea (46-0-0). If needed, fertilize the entire field using a conventional spreader. If you only want to fertilize the newly sprigged area, simply apply the fertilizer with a hand-held rotary type seeded/spreader. If an agricultural type fertilizer like ammonium nitrate, urea, or 10-10-10 is used, water the fertilizer in immediately after application. Specialty turf fertilizers, with some slow-release nitrogen, will have less burn potential.

(8) Complete fill-in will occur within six to eight weeks after sprigging. Just water, fertilize and mow as needed.