

Nursery Rhymes

by CHARLES B. WHITE

Director, Southeastern Region, USGA Green Section

CHURCHES HAVE nurseries, hospitals have nurseries, health clubs have nurseries and shopping centers have nurseries. We have child nurseries, animal nurseries, ornamental nurseries, and even tree nurseries, but not often enough do we have good golf course nurseries! Why is that?

Too often a golf course nursery doesn't exist, or it is in a sad state of repair. If one does exist, seldom does it reflect the quality of turf found on the golf course itself, particularly if it's a putting green nursery. It may have been originally seeded to the same grass as the regular greens, but it is usually neglected with time, and a sod of poorer quality results. In that state, the nursery's chief use is as an occasional lunch time practice area for the crew, or an experimental testing ground to kill grass. These are not really the functions of a sod nursery in a top flight operation.

A true golf course nursery, defined in the purest sense, is a turfgrass area where sod is grown and kept readily available for use on putting greens, collars, tees, and fairways. It is managed exactly as the intended "use area" on the course. It requires this kind of maintenance so that it will be completely functional when installed. There is little value to a putting green sod nursery maintained at 1/2-inch height of cut. If it is ever needed on the course, it will take weeks to become acclimated to actual putting green conditions. Unfortunately, this type of situation is more often the rule than the exception when so-called "nursery areas" are established and maintained on many golf courses today.

If a putting green nursery is established, it should be mowed, watered, treated with pesticides, and culturally managed just as a regular green. Later, when sod or plugs are transplanted onto the putting surfaces of the golf course, there is no shock factor to contend with, other than the actual movement process of the grass itself.

To do it right, a putting green sod nursery should be established with

the same soil as that found in the existing greens. This prevents soil layering at a later date whenever the sod is used. If heavy or poor soil conditions exist on the greens, however, then a root zone may be established in the nursery, having a slightly higher sand content without creating an extremely sandy condition. Mixing a quality topdressing sand and soil similar to that of the putting green profile is one suggestion. This may not produce the most desirable root zone, but it will be more compatible with the particular greens, especially if a long range aeration and topdressing program is instigated.

When establishing a tee or fairway nursery, a slight rise or fill of 10 to 12 inches above normal ground level with a quality soil is suggested for a proper root zone to become established, and so the area will not be subjected to surface runoff from adjacent areas. If raising the height of the nursery is not possible, then it should be plowed deeply to remove any compaction or hardpans. If soil and nutritional amendments are necessary, they should be added to the final soil mix and thoroughly incorporated into it.

Soil sterilization is especially important on putting green nurseries, since it is the only method of insuring complete eradication of foreign grasses and weed seeds. Methyl bromide is widely and carefully used at the rate of one pound per 100 square feet for effective weed control. If the putting green sod nursery is not free of weeds, how can it improve the golf course on a long term basis?

SOUND CULTURAL programs are essential on nursery areas to promote the most actively growing turfgrass possible. This is *not* accomplished with *nitrogen*! Nursery areas are not usually subjected to traffic, and, therefore, thatch accumulation is a serious problem. Traffic, especially on greens, can reduce thatch buildup. If an area is not subjected to traffic, lower nitrogen rates and rigorous vertical mowing, aeration and

topdressing programs are the main means of thatch control. Sod with excessive thatch is most difficult to install properly, prevent from scalping, and establish in its new location. Proper installation sometimes is virtually impossible, and so keeping thatch under control in the nursery is extremely important.

Other critical management factors include the maintenance of proper soil pH and nutritional levels. This will insure optimum growth and vigorous stolons, rhizomes and root systems. If these growing areas of the grass plant are maintained in an active state, the sod nursery will be at maximum aggressiveness and recuperative potential.

How large should a nursery be? Answers vary from individual to individual, but ideally a putting green





(Above) A large bentgrass putting green nursery and systematic removal of sod.

(Right) Example of systematic removal of plugs.



nursery should be as big as the two largest greens on the golf course. This provides a workable size for sod removal to offset unexpected disasters, vandalism, loss due to chemical burn, insect or disease invasions. A good rule of thumb for tee nursery size is to keep an area about the equivalent of the three largest tees if the tee grass is different from the fairway grass. If the turf is the same on tees and fairways, then 1 to 1½ acres will provide an excellent source of sprigs, sod or plugs for all of the areas. Such a nursery would most economically be maintained under fairway conditions, since a strong, healthy turf can quickly adapt to teeing surfaces, if necessary. It is important to stress again that a large enough area is needed to be feasibly workable in the removal of sod and rejuvenation of grasses.

Sod removal from a nursery should not be in a random or “stealing” pattern of sod plugs from all over the area. The process should begin at one side of the nursery and removal accomplished in a systematic order from one side to the other. If random removal of plugs or sod is allowed, great quantities of quality sod are wasted, uneven surfaces quickly develop, and regular maintenance practices (mowing, fertilization, etc.) are made more difficult. The practice also prevents a large, untouched uniform area of quality sod from being available

when and if large sod quantities are needed.

Sod from a nursery should be cut as thin as possible (usually between ½-inch to ¾-inch), so long as it holds together when carefully handled. This allows it to be laid down in the smoothest conditions. Thick sod is much more difficult to handle. The layering from thick sod is also more difficult to remove with aeration than layering from thin sod. Thin sod also saves money, because less fill soil is needed to refill the area from which the original sod was removed.

Putting green sod should never be rolled up for transportation or handling purposes. This stretches and opens the sod. There is frequently a loss of soil, causing an uneven surface (requiring more topdressings). Putting green sod should be transported in a flat condition.

If proper fertilization practices are maintained (providing adequate phosphorous and potassium to produce vigorous root systems, the new sod will begin its root system rejuvenation about 24 hours after it is placed in its new location. Even so, an application of 16-20-0 or an activated sludge incorporated in the new sod bed, prior to the laying of the sod, will prove beneficial. This fertilizer application should be watered in lightly. Thus, in a period of about one week, the new sod will have pegged down fairly well.

SODDING IS a very tedious and time consuming task. It should not be rushed. Proper sodding techniques include fitting the sods together as tightly as possible and then smoothing, rolling and/or tamping the sod as necessary. Filling all remaining cracks between the sod strips with soil will reduce wilting and drying out of sod edges. It will also help produce a smooth and uniform surface as rapidly as possible. Careful follow-up irrigation practices will also be necessary for several days after completing the sodding job.

It should be no surprise that, once a good source of sod is available on any golf course today, the superintendent will find increased uses for it. Thin and worn areas, once impossible to improve, will be rapidly repaired. Scars from vandalism and other causes will no longer be an eyesore and distraction for weeks on end. Such situations are not pleasing to members, and if they are corrected, the membership soon recognizes the golf course superintendent for setting things right as soon as possible.

Consider the importance of a properly planned and managed sod nursery at your golf course. It holds benefits for the course, the membership and, equally important, for the golf course superintendent as well. It's good management. Your golf course needs a nursery!

Maintaining a vigorous turf ensures rapid healing after systematic removal of plugs.

