9. FUNCTION is to perform as expected or required. A hedge, for example, functions (works properly) if it screens the building and that's what you intended it to do.

10. PERSPECTIVE is the effect of distance upon the appearance of objects by means of which the eye judges spatial relations. For instance, a few geraniums and a tree planted 10 feet from a sitting bench, have much more effect on a person sitting there than if the same amount of material is viewed from 300 feet.

In the following example, we have tried to utilize the aforementioned components: A new septic field has just been put in with 21 air vents that are seen out of the clubhouse window - "FIX-IT"!

You are dealing with black vertical shapes (pipes) equally spaced across an open field. You may feel your first concern is to hide the pipes. However, you are also in a position now where you can change the area and make it something to **look at** instead of just hiding pipes.

Since golf courses are mainly composed of flowing lines, liquid forms, repetition and balance, we had better stay within these boundaries. The drainage bed can be made to look like it belongs on the edge of the woods by planting transition or pioneer type plants down to it. If there are pines and oaks growing 100 feet away from the bed or pipes, fill in that





space with bushes or plants that would normally be found on a wood's edge (Sumac, Pincherry, Amelancher, Dogwood, etc.)



By planting the sumac in mass, they took on FORM. By controlling the FORM, a LINE was created between the woods and the grass. Since the LINE is free flowing and meandering, copying the woods and grass, it blended into the woods and rough without calling attention (no EMPHASIS) and also has REPETITION of LINE and FORM.

The sumac leaves are of medium TEXTURE when compared with grass (fine), or oak (coarse) thus helping with the transition. VARIETY is satisfied because of the height change (between trees and grass) and different species than the surrounding plants. The vibrant orange red of sumac in the Fall against the oak and pine satisfies COLOR.

By planting sumac on both sides, we create a bit more BALANCE to the view. Large numbers of plants were used because we are trying to tie into areas of large trees and acres of grass - 21 sumac would never dwarf 21 vent pipes, but 100 will sure draw attention **away** from the pipes. (PERSPECTIVE) On the other hand, if one is looking for sewer pipes, one can still see them. (FUNCTION) However, as the plants grow around them, they are becoming a smaller percentage of the total landscape and more, the background.

### My Viewpoint "Sand Top Dressing"

by Ray Knapp, Golf Course Superintendent, Tuckaway C.C.

In southern Wisconsin there is a definite trend toward sand top dressing on greens. Because of the number of courses on a program we are now able to get the answer to many questions we have had about sand top dressing. We are now getting information that indicates amounts of sand needed in our area to maintain a program. Likewise, we are finding the equipment combinations that do a more efficient job.

There are two types of equipment being used to apply sand top dressing. Everyone is familiar with the standard drop type spreader. Some of them are self propelled. Others are mounted on turf trucksters. Examples of these are manufactured by Cushman, Ryan and Sodmaster. In our area several superintendents have used the Broadcast spreaders. Lily is the manufacturer of the only Broadcast spreader being used in our area. This spreader is used with the attachments of a salt agitator and a fast feed ring. With this setup about 2-1/2 cu. ft. per 1000 sg. ft. of sand can be put on at a time. To get more material per application a special feed ring with a large opening can be made using seven inch P.V.C. pipe.



In the future I see a trend towards the use of the Broadcast spreader. Graph 1 shows that with the Broadcast spreader labor hours are better utilized. At lower rates per application twice the cu. ft. sand can be applied per man hour. Other advantages of Broadcast spreaders would be lower initial cost and lower maintenance.

A question that I cannot answer is which type of spreader gives the evenest distribution. From talking to many superintendents I have found that no one is dissatisfied with either type. From this information I'm afraid to guess which types would be best for long term use.

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SAND APPLIED WITH DROP SPREADER Vs. BROADCAST SPREADER





#### My Viewpoint cont.

Graph 1 is based on information from six golf courses in southern Wisconsin. The man hour figure is based on all labor hours required during top dressing to get the area ready to be mowed again. After top dressing the sand is either watered or matted into the turf. This labor is included in the man hours.

I feel that there is currently a trend towards maintaining greens at a no-thatch level. There are many advantages of maintaining greens this way. Less fungicides are needed. On a preventative disease program 1/4 - 1/3 less fungicide is needed. Another advantage when greens are maintained in a no-thatch condition is that no other maintenance practices are necessary to thin the grass other than frequent mowing. For the golfer it is easier to keep the green in a uniform condition throughout the season.

To get to a no-thatch level it may take two years of sand top dressing of 30 - 40 cu. ft. per season. After this level has been reached the amount of sand needed can be predicted as to the amount of nitrogen applied.

Chart 2 shows the relationship of nitrogen usage to the amount of sand required to maintain a no-thatch level. It can be used to a limited degree for budgeting to predict sand requirement. More data will be needed to varify its validity.

From my experience I feel the number of top dress applications are not as important as the total amount of sand applied when a no-thatch program is followed. A successful top

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dressing program can be maintained with as little as three applications of sand per season. Chart 2 could be used to obtain the amount of sand needed per season. The number of applications can then be made to fit the individual club's playing schedule.

In the future we need more information about acceptable particle sizes of sands for top dressing. Currently I'm aware of 6 different sand sources used by Wisconsin superintendents. Hopefully, all these materials are acceptable and will give the desired charac-

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### SAND REQUIRED TO MAINTAIN NO THATCH AT DIFFERENT NITROGEN LEVELS



This chart is based on Data from three Golf Courses in Southern Wisconsin for bent grass greens. My Viewpoint cont.

teristics. Every superintendent should keep accurate records of materials and amounts used. This information may be of tremendous value in future years to clear up areas where there are now questions.







# Creed

Wisconsin Golf Course Superintendents Association

We, the members of the Wisconsin Golf Course Superintendents Association, depend upon the unity, as well as the professionalism of our membership, to cultivate and maintain superior golf turf as well as golf atmosphere.

The knowledge that is gained through continued education and experience in turfgrass maintenance should be openly shared with mutual trust and comradarie among fellow members. To strive for further and continued knowledge and excellence in all phases of golf course maintenance is our ambition. The Proud legacy of our profession depends upon the pride and integrity which each individual takes within himself.

