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GCSAA  
Continued from page 49

a rather frightening increase.

However, Myers concluded that, on the whole, he had faith in the ingenuity of the human race to outrun the Malthusian doctrine for many more generations to come.

Warren A. Bidwell, superintendent, Philadelphia (Pa.) CC, then went into the area of public relations as regards the superintendent. He said that just as the front door of a man's home is the symbol of his hospitality, so the appearance of the club, and the clubhouse grounds should be made attractive enough to give a "welcome" feeling to all who drive onto the club property.

The effects of temperature and light on vegetative growth" was the topic of the next speaker, Victor B. Youngner, associate professor of agronomy, U. of California.

S.J. Richards, professor of soil physics, U. of California, discussed water usage, and in particular the use of soil water sensors as a guide in irrigation management. He cited the good performance of an automatic irrigation system equipped with a tensiometer-type hydrostat compared with a manually set system in an experiment conducted on the campus of the U. of California in 1961. He also discussed another demonstration when model green profiles—one built to USGA specs, the other the same except it had a 24-inch layer of fine sand between the planting mix and the coarse sand and gravel layers—were compared to determine water storage properties by means of tensiometers located at two and ten-inch depths.

Root competition between trees and turf was the topic of the next speaker, Carl E. Whitcomb, research associate, Department of Ornamental Horticulture, U. of Florida. Whitcomb pointed out the results of an experiment conducted at Iowa U. last year.

Because of the differences in root response, shallow or surface rooted trees such as silver maple, sweet gum, cottonwood, willow, Australian-pine and others should not be planted near greens or tees. Although these trees are affected...
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GCSAA (Continued from page 82)

more by turf competition when planted, if they survive, they will eventually create severe root problems due to root proliferation in these intensive maintenance areas, making them “hard” and difficult to maintain.

The next talk posed the question: Is your swimming pool an asset or a liability? In the chair was J. Henry Mohr, president, Nor-Cal Engineering Company, Redwood City, Calif., representing the National Swimming Pool Institute. Mohr told how the institute, a 1,300 company-strong trade association, has two excellent manuals available entitled “Swimming pool operations manual” and “A swimming pool engineering manual.” However, he emphasized that the main thrust of the association’s educational program was to convince managers that the swimming pool is a valuable physical asset and deserves responsible and knowledgeable handling.

With the growing practice for a golf club to have a tennis club membership, the problems of court maintenance are becoming of increasing importance to the superintendent. Dennis Van der Meer, tennis pro at the Berkeley Tennis Club, Calif., talked about this to the assembled greensmasters.

Many clubs in Canada and the northern parts of the U.S. have long recognized the need for year-round operations. Establishing curling facilities have enabled them to make this transition, said David Gourlay, superintendent, Thornhill CC, Ont., in his talk on this ancient sport.

Where does the superintendent fit into this new operation? In many cases, he will be asked to increase his responsibilities by supervising the ice making and maintenance operations.

Gourley concluded by citing the governing body of the game, the United States Curling Association, as being a prime source of information to a club desirous of starting a curling program. There are also professional curling consultants and help from the ice-making industry.

“Recognizing turfgrass diseases” was the subject of the next talk, by
Proper lighting Continued from page 52

surfaces will assure maintaining the "image" of the club and appearing as a part of the over-all complex.

The effect of the color on the merchandise should also be considered at the same time. In selecting the wall color, for instance, a color that enhances the appearance of the merchandise is essential.

As a rule of thumb, browns, tans, and blues generally are used to achieve the masculine or outdoor look. Judicious use of sharp colors (red, yellow, turquoise) for accent purposes will add some snap to the appearance.

As the number of women buying in pro shops increases, more pros are establishing women's departments. To display properly that type of merchandise, feminine colors (pink, yellow, orange) will be more appropriate.

It might be well to state here that though the above are normally considered best-suited for the purposes mentioned, fashion is an ever-changing thing. If the colors of the merchandise are not compatible with the colors suggested, then the merchandise must get first consideration—not the rule.

Correct use of color is somewhat like knowing that the sand wedge should be ordinarily used for trap shots. There are times when the putter is the better club for the shot, but, just as extreme care is required when the putter is used, so extra care is needed when one expects to depart from the usual in color.

We've discussed the selection of background (floor, ceiling, walls) colors for the merchandise presentation. The selection of fixture colors and decorative color accents can add the sparkle and interest essential to the smart looking shop. However, it should always be borne in mind that the appearance of the merchandise is the main object of our efforts. Every color selected—whether for background, fixtures, or decoration—should contribute to enhancing the appearance of that merchandise. It can safely be assumed that an attractive looking shop will follow.

It is rather easy in this new era of color in merchandise to achieve dramatic looking displays. The new colors and the ease with which they can be used together, has simplified the selection of colors to achieve good results. These are a few points that should be borne in mind.

All displays in the shop should be emphasizing the same color or combination of colors at the same time. This will help to achieve a visual impact that can otherwise be lost. Also, the use of one dominant color is effective.

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GCSAA  Continued  from  page  84

Stan  Frederiksen,  manager,  Turf  Products  Division,  Mallinckrodt  Chemical  Works,  St.  Louis,  Miss.,  and  John  L.  Weihing,  professor,  Agricultural  Extension  Department  of  Plant  Pathology,  U.  of  Nebraska.  The  speakers  emphasized  that  accurate  turf  disease  identification  sometimes  isn’t  easy.  Often,  the  complete  facts  may  be  difficult  to  get,  especially  when  turf  plugs  are  being  dealt  with,  after  being  subjected  to  varying  conditions  during  lengthy  travel  periods.  Under  any  condition,  there  may  be  an  honest  difference  of  opinion  as  to  which  of  two  organisms  is  doing  the  damage  —  and  perhaps  one  or  both  are.  The  speakers  recommended  that  the  superintendent  stock  his  library  with  good  books  on  turf  diseases.  Dr.  Malcolm  Shurtleff’s  “How  to  control  plant  diseases”  is  excellent.  They  also  recommended  Dr.  Houston  Couch’s  fine  new  book  “Diseases  of  turfgrasses.”

John  P.  Dunlap,  superintendent,  Oakwood  CC,  Cleveland,  Ohio,  gave  a  talk  on  proper  chemical  application.  He  said  that  in  the  last  few  years,  superintendents  have  had  to  become  more  efficient  because  of  rising  labor  costs.  However,  don’t  be  trapped  into  thinking  that  the  easiest  and  quickest  method  is  always  the  best  way.  Quality  of  chemical  application  must  always  be  maintained.

Dunlap  then  discussed  the  equipment  and  methods  he  uses  at  his  club.  For  greens  and  tees,  he  now  uses  a  turf  truckster,  fitted  with  a  boom  for  spraying  and  a  rotary  spreader  for  dry  chemicals.  His  old  method  of  spraying  took  five  to  six  hours  to  spray  18  greens,  while  with  the  new  method  all  18  greens  can  be  finished  in  just  two  hours.

Labor  savings  on  green  fertilizing  are  just  as  impressive.  Dunlap  used  to  apply  dry  materials  by  means  of  bag  type  cyclone  spreaders.  Fertilizing  the  greens  this  way  needed  three  men  about  four  hours.  One  man  and  the  truckster  can  now  do  this  in  one  to  one-and-a-half  hours.

On  fairways  and  roughs,  Dunlap  still  thinks  that  a  good  20  to  30-foot  boom  sprayer  is  the  best.  Wind  drift  is  cut  to  a  minimum  and  it  does  a  good  job  of  applying  the

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Continued from page 86

chemicals evenly and accurately. He objects to blowers because of the amount of chemical lost because of wind drift. The use of a broadjet spray head is a possibility, he said, but here again only a calm day would be suitable for its use.

The introduction of rotary fertilizer spreaders has greatly speeded up fertilizing fairways over the use of the drop type spreader, Dunlap said. Also, the rotary spreader pretty much eliminates the chances of overlapping and missing.

Harry C. Eckoff of the National Golf Foundation went into the trends in golf course development. He said that the shortage of available mortgage money at reasonable rates which has prevailed during the past two years and the increasing costs of construction are having their effect on golf facility development. New course openings for 1967 are down 8% from the 1966 figure. New construction starts are down 17%.

"Golf courses for the public" was discussed by Richard Haskell, director of golf, City of Seattle, Washington. Haskell said that in general the pub links golfer wants a course that he can be proud of. It should be in good condition, not too hard, but one that can be made tough enough to test the expertness of the good golfer.

Richard A. Sincerbeau, golf course planner, Ellis, Arndt and Truesdell, Inc., Flint, Michigan, went into the question of adequate records for good control and budgeting. Records, he said, can be the basis for necessary advanced planning on past performance, as well as for day-to-day operation.


Ames discussed the service customers should expect under a proper warranty program. He also stressed that customers should let the manufacturer know how his product is performing, as this information is essential to the manufacturer to help him improve the product. Elstad said that establishing a program for preventive maintenance was the most economical and efficient method of keeping the equipment running. Thomas also stressed preventive maintenance, but added that the level of maintenance was the key to the life span of equipment. An average level of maintenance will yield an average life from a piece of equipment. A high level of maintenance, a longer life.

There was then an excellent and interesting demonstration of two-cycle and four-cycle engines conducted by Kenneth Weill of Jacobsen, James B. Holsen of Kohler and B. H. Robinson, Wisconsin Motor Corporation. The session concluded with a spirited panel.

Continued on page 90
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Continued from page 88

discussion by all participants.

The USGA Green Section put on a fine show in their thorough coverage of the putting green. The all-day session covered green design, construction and maintenance, including discussion of the more popular strains of grasses for putting greens and their differing requirements. Especially notable was a new USGA movie entitled "The ABC's of putting green construction." (Clubs interested in viewing this movie should write the association at 40 East 38th Street, New York, N.Y. 10016).

The irrigation clinic was chaired by Herman R. Johnson, GCSAA director and superintendent, Quail Creek G&CC, Oklahoma City, Okla.

Richard R. Abernethy, Telsco Industries, Weathermatic Sprinkler Division, Dallas, Texas, discussed the problem of communication between the operating superintendent and the turf irrigation industry. To bridge the gap, Abernethy presented a "Golf course irrigation system check list and planning guide" that should do much to alleviate the problem.

Don Hogan, D. A. Hogan & Associates, Engineers, Seattle, Washington, dealt with the primary decisions in the procurement process. While the "package deal"—where the material supplier or the installation contractor, or in some instances the architectural firm will furnish the entire package of design, materials, equipment and construction—is certainly an attractive method because there is a single point of responsibility, the club, nevertheless, is vulnerable. The seller is determining the amount and quality of the work and material, while the owner does not have an experienced person representing his interests. Another disadvantage is that the design and materials are customarily limited to the products of a single company.

The second method is the combination of design and materials supplied by one firm and a separate contract for installation, or the owner installs the system. While this method will generally result in the lowest direct cost for the system, there are the same disad-