

sents no problem because to date no response has been obtained on bermuda grass with this element. Calcium is essential not only for its effect on the growth of grass but in its effect on flocculation of clay, which makes it more stable. In one case 269 tons of ground limestone to the acre produced no symptoms of minor element deficiencies but greatly improved the physical soil structure.

Discuss Mowing Costs

Henry Westall, Worthington Mower Co., Asheville, N. C., spoke on mowing and mowing machinery in turf production. He cited some historical developments and brought us up to the present day. A demand for mowing equipment that is out in front of the tractor and which cuts the grass before the tractor wheels mash it down was evident.

A number of questions arose on the cost of mowing and care of grass under different conditions. The answers were not very satisfactory but he cited one cost of 5c an acre for mowing airport turf

with a large outfit. He stated that the cost is reduced as the number of units is increased. The problem of how to mow dallis grass was raised and again there was not a very satisfactory answer. This grass produces seedheads many of which escape all modern mowing equipment.

A. V. Tribble, Cherokee CC, Knoxville, Tenn., spoke on "Turf Problems as I Have Found Them at Cherokee." He was faced with three basic questions:

1. Can you grow bent grass greens at Cherokee? The answer was, "I cannot tell until I have surveyed all of the conditions involved."
2. Getting the history of the course and records of what had been done proved to be extremely difficult, emphasizing the need for keeping better records that are available at all times.
3. Soil analyses of turf areas reveal some startling cases. The chief one was an excess of clay and silt and the almost complete absence of drainage in the soil. Eleven greens are bermuda grass

1949 CALENDAR OF EVENTS

FEBRUARY

- 3-6—Tucson (Ariz.) Open Inv., El Rio G & CC
 10-13—Texas Open Inv., Brackenridge Park GC & Ft. Sam Houston GC, San Antonio, Tex.
 17-20—Houston (Tex.) Open Inv., Pine Forest CC
 24-27—Rio Grande Valley Open Inv., Harlingen (Tex.) Municipal GC.

MARCH

- 3-6—St. Petersburg (Fla.) Open Inv., Lakewood CC.
 10-13—Miami (Fla.) Four-Ball Inv., Miami Springs CC.
 14—La Gorce CC, Pro-Am. Inv., Miami, Fla.
 15-16—Seminole CC Pro-Am., Inv., Palm Beach, Fla.
 18-21—Jacksonville (Fla.) Open Inv., Municipal GC.
 31-Apr. 3—Greater Greensboro (N. C.) Open Inv., Starmount Forest CC.

APRIL

- 10—Masters', Augusta (Ga.) National GC.

MAY

- 12-15—Goodall Round Robin, Wykagyl CC, New Rochelle, N. Y.
 25-31—National P. G. A., Hermitage CC, Richmond, Va.
 23-28—British Amateur, Portmarnock, Ireland.

JUNE

- 4-8—British Open, Deal.
 9-11—U. S. Open, Medinah, CC, Chicago dist.

- 14-17—Western G. A. Junior, Univ. of Mich., Ann Arbor.
 16-19—Western Open, Kellar GC, St. Paul, Minn.
 20-25—Women's Western G. A. Inv. Open, Oklahoma G&CC, Oklahoma City.
 27-July 2—NCAA Championship, Univ. of Iowa, Ames.

JULY

- 11-16—U. S. Public Links, El Rancho GC, Los Angeles.
 27-30—USGA Junior, Congressional CC, Washington, D. C.

AUGUST

- 1-6—Women's Western Junior, Onwentsia CC, Lake Forest, Ill.
 2-4—Hearst National Junior.
 2-7—U.S.J.C.C. Natl. Junior Amateur, Houston, CC.
 8-14—All American, Tam O'Shanter CC, Chicago dist.
 16-18—Western Junior, Univ. of Mich., Ann Arbor.
 19-20—Walker Cup Match, Winged Foot, Mamaroneck, N. Y.
 22-27—Women's Western Amateur.
 29-Sep. 3—U.S.G.A. Amateur Golf Championship, Oak Hill CC, Pittsford, N. Y.

SEPTEMBER

- 12-17—U. S. Women's, Merion CC, Ardmore, Pa.
 16-17—Ryder Cup Matches, Ganton, Eng.
 19-25—Western G. A. Amateur, Bellerive CC, St. Louis.