1977 SUMMARY OF RESEARCH REPORTS
U.S.G.A. GREEN SECTION RESEARCH AND EDUCATION FUND, INC.

UNIVERSITY OF ARIZONA - Dr. William R. Kneebone, Project Leader

Funds Granted - $1,000 —— Frost Damage Study on Bent and Poa Annua Putting Greens.

This is the first year of support. In the test area, a miniature green was constructed and has been overseeded. A second test site will be at the Tucson Country Club and a third at Sierra Vista Country Club. Investigations will include nutrition and the use of protective covers or fans. Surface temperatures will be recorded to determine levels for play without incurring injury to the bentgrasses.

AUBURN UNIVERSITY - Dr. Ray Dickens, Project Leader

Funds Granted - $1,500 —— Effects of Management on Winter Survival of Centipedegrass.

Applications included various rates of nitrogen, phosphorus and potassium. Also included were treatments of iron and pesticides as needed over one section of the plots. The data is still being gathered and analyzed. The final report will be submitted in May of 1978; however, these observations were offered.

The best cover of centipedegrass in March was obtained on plots treated with 3 pounds of nitrogen per 1,000 square feet per season in most cases. Excess rates of nitrogen in fall reduced spring cover.

The 1976 freeze tests showed reactions among nitrogen treatments, phosphorus rates, cutting heights and applications of soluble iron which will be reported in 1978 after all data is analyzed.

UNIVERSITY OF CALIFORNIA - Dr. V. B. Youngner, Project Leader

Funds Granted - $2,000 —— Aeration Study on Soils and Turfgrasses.

Results show that from an aeration viewpoint in contrast to water infiltration, one or two aeration treatments a year will have little benefit. Frequent aeration with close spacing of the holes is necessary for any significant improvement in soil oxygen flux. Little or no lateral air movement occurs from the sides of the aeration holes. In turf of some grass species the root system itself appears to have significant effects on soil-air relationships. Soil oxygen profiles have been measured to a depth of 10 inches under several turfs. The results of these studies are now being analyzed.