Prior to sodding, the soil had been thoroughly worked to break compaction and had been well fertilized. The operation was completed the first week in July and by the time of the meeting it was well knit and had developed a dense, vigorous turf. Those at the conference were impressed that a major repair job of this extent could be done at the relatively low cost involved in growing and transferring the sod.

The diversity of interests among those attending, the number present, and the very serious interest in more technical phases of turfgrass management was very gratifying to those responsible for the turfgrass research and extension program at Penn State. It is further evidence of the need for sound information in this field and the complete willingness of everyone to accept research findings once they are assured that the results are based on carefully designed and well conducted experimental work.

Weed Problem Attacked at So. Calif. Field Day

By VERNE WICKHAM

"There is no profit where weeds are concerned. They spell only costs and losses," George A. Izay, Asst. Park Supt., Burbank, Calif., told the more than 300 who attended the annual So. California Field Day in October at Forest Lawn-Hollywood Hills with field demonstrations at Buena Vista Park in Burbank,

Izay's topic was "What It Costs to Live with Weeds." He cited the huge loss to golf courses. "Weed control, no matter which method is used, is high in cost of time and labor as well as money," he said. "Turf on courses and athletic fields must be kept reasonably free from weeds. Good grass growth that is dense and healthy is, of course, the most satisfactory means of controlling weeds. It has been estimated that the average life of a turf, before needing renovation, is from 3 to 5 years. In 1954 a survey was made in Los Angeles County which set the total value of 63,-500 acres in the county at \$262,457.700. At a replacement rate of \$.05 per sq. ft., it would cost \$138,281,200 every five years to rejuvenate this turf. Since our turf is never renewed at that rate, we may assume that we are paying tribute to weeds in having to live with second and third-rate turf. A very conservative estimate is that the cost of combating weeds on a golf course in this area is roughly \$20 per acre. This rate applied to the 3163 acres of golf course turf in the county represents an annual expenditure of \$63,260 in the battle against

weeds, A typical cemetery expenditure in weed control is \$15 per acre. The athletic field \$30 per acre each year. This is a heavy cost and doesn't take into consideration water and soil nutrients lost each year to weeds. Fortunately, scientists have made giant strides in the effort to stop this waste. With the knowledge they have gained there is increasing hope that man shall eventually be the master over weeds." William A. Harvey of the University of California, chose as his topic, "Know the Weeds, Know The Method."

Harvey gave an outline of type of herbicides, citing the vital importance of first identifying the weed and then selecting the best known chemical to eradicate it. He told of the many kinds of chemicals, some old and some new, and divided his field into selective and non-selective herbicides. "Selectivity," he said, "may depend upon differential wetting, differences in form of plant and upon placement of the spray. Selectivity depends primarily on biochemical differences between plants."

As to the non-selective herbicides, Harvey said they were aimed at "killing everything in sight" Chemicals in this group, he stated, kill only the plants or portions of the plants actually contacted by the chemical. Annual weeds are usually killed by one thorough treatment. Perennial weeds require retreatment. Many of the same chemicals are used in both selective and non-selective fields. It is their use and methods of application that determine their selectivity, he said.

The group then witnessed a soil treatment demonstration by J. J. Stark, Extension Service, Los Angeles County, and inspected weed control plots in Buena Vista Park. The next day an open house was held at the experimental test plots at the University campus and crabgrass test plots at Bel Air CC.

Quarter-Century Pro Meet Scheduled for Jan. 29-30

Annual tournament of the PGA Quarter-Century club will be held at Dunedin, Fla., on Jan. 29-30, immediately following the PGA Seniors championship.

More than 300 men who have been in the pro ranks for 25 years or more are eligible to take part in the 36-hole event, jointly sponsored by the PGA and Professional Golf Co. of America, Inc. Prizes totaling \$2,500, \$1,000 in cash and \$1,500 in merchandise will be awarded to winners in various age groups. In 1956, every pro who took part in the tournament won a prize.

National Turfgrass Conference Feb. 10-15 Kentucky Hotel, Louisville