is more danger of drift damage to nearby ornamentals with the ester forms.

The broad-leaf weeds are forced into an erect type of growth when the bent turf is dense. Then these weeds are more unsightly than they are bad for play. The number developing from seed in a single season is small so there is little to be gained by waiting until fall to spray. By checking growth of bent, the use of 2, 4-D at that time might pave the way for the invasion of poa annua, chickweed, etc.

Use of Lime

The use of lime is justified on fairways where the soil is more acid than pH 6.0. At least a ton to the acre of ground limestone should be applied where the reaction is between pH 5 and 6. Double that amount is not too much where the reaction is below pH 5. The quantities can be reduced somewhat for sandy soil, and increased on heavy soil. On soils where available magnesium is low, a dolomitic type of ground limestone should be used to eliminate any possibility of a plant food deficiency in this element. The dolomite should contain not less than 20 per cent of magnesium reported as the oxide. The analysis is generally printed on the bags, or it can be obtained from the producer.

Although nitrogen fertilizer is the key to dense fairway turf, soils should be checked for reaction and possible deficiencies of phosphorus and potash. Lime should be applied first as suggested above. Phosphate and potash come next. One good application will last for several years because clippings are not removed. After that it is a matter of providing enough nitrogen. Generous rates are justified where the grass is thin until a good turf is developed. Then quantities can be reduced somewhat, to an amount which will provide enough to maintain a dense turf and keep clover in check.

On unwatered fairways it is customary practice to apply most of the fertilizer in early fall. Grass grows best then and in the following spring. There is a trend in some districts toward summertime feeding on watered fairways. Light to moderate rates are used in late June and again in late July or August.

The trend on courses with watered fairways seems to be to use the water to keep the grass alive rather than to keep it lush and green at all times. Clubs faced with labor shortages are questioning heavy watering of fairways. To stop altogether may not be wise where the turf is mostly poa annua or creeping bent. It can be done if the grass population is blue grass or colonial bent.

U. of Mass. Turf Conference Program To Be Different

The 34th annual turf conference to be held at the University of Massachusetts will open its first session at 10:30 A.M., Thursday, March 8, in Bowker Auditorium in Stockbridge Hall. The program will continue through the day until 5:00 P.M. with moving pictures during the hour-and-one-half luncheon period. At 6:30 the annual conference dinner will be held at Hotel Northampton.

Friday, March 9, the program will start at 10:00 A.M., have movies during the lunch hour and close at 3:30 with the presentation of certificates to the members of the twenty-first class of professional turf growers who have been attending an intensive and specialized ten-week course which started January 3.

Following the conference program the annual meeting of the Massachusetts Section of the New England Turf Association will be held.

Professor Lawrence S. Dickinson, agrostologist at the University, who started the turf conferences and is founder of the first school of turf culture ever held, urges all persons interested in the growing of fine turf grasses to attend the conference. He said, "Last year we promised something different, and we are not going to let the turfmen down." One thing is certain, there will be much information and many ideas to be absorbed painlessly.

Purdue Turf Conference March 5-8

Purdue's Annual Turf Conference for 1951 will be held in the Memorial Union building, Lafayette, Ind., March 5-8.

The extension turf specialist at Purdue, Dr. Wm. Daniel, announces lectures will be on Dutch elm disease; establishment, maintenance and renovation of turf; chemical control of turf weeds and insects; recommended varieties of fairway and tee grasses; the planting, pruning and maintenance of shrubs; labor and its management, and water conservation and water management.

Over 400 attended the Purdue turf sessions in 1950, coming mostly from the states of Illinois, Michigan, Wisconsin, Missouri, Ohio, Kentucky, and Indiana. Those who plan to attend the Purdue conference this year should arrange for rooms early in advance, Dr. Daniel advises.