

way management, because grasses never spread on nitrogen impoverished soil. Annual nitrogen feeding is customary practice, because, unlike phosphoric acid and potash, appreciable nitrogen loss may occur from excessive leaching, and may also result from denitrification.

Rate and frequency of application depend upon turf coverage, soil impoverishment, and local climatic conditions.

On nitrogen-starved turf, where coverage is sparse and soil impoverished, heavy feeding is justified, spring and fall, until turf of desired density is secured, and then rates can be reduced to a bare maintenance level. This general rule requires slight modification in extreme northern latitudes, and also along the southern fringe of the region adapted to northern grasses. Excessive late fall feeding may aggravate winter-kill in more northerly regions, so heavier spring fertilization with somewhat lighter rates in the fall should be best. Crab grass is a very serious pest in districts such as Philadelphia, Cincinnati, St. Louis, Kansas City, etc., so major nitrogen feeding should be in the fall, with spring rates reduced to quantities which will not build soil reserves to increase crab grass growth in July and August.

On impoverished soils from 80 to 100 lbs. or more of actual nitrogen should be applied spring and fall until turf attains desired density. After that, annual rates can be reduced to 50 to 80 lbs. of nitrogen per acre each year.

True organics can be applied even at the higher rates in a single application, but when soluble materials are used the fertilizer should be divided into two equal applications, and applied at intervals of 7 to 10 days.

Frank Danelli Is President of Midwest Greenkeepers Association

FRANK DANELLI, Northmoor CC, was elected president of the Midwest Greenkeepers Assn., succeeding C. A. Tregillus, Mill Road farm, at the association's annual meeting. Other officials elected: Fred Ingwerson, Bunker Hill, first v-pres.; Stanley Arendt, Meadow Grove, second v-pres.; Harold Clemens, Sunset Ridge, secy-treas. Directors elected: C. A. Tregillus, John MacGregor, J. T. Langell.

The organization recorded another active year of extensive and definite value to the clubs represented in its membership. The practical, helpful character of the monthly meetings, Tregillus noted in his

final address as president, had been of such monetary value to golf courses that attendance at the meetings should be considered a privilege by every greenkeeper in the Chicago area.

Andy Gillett won the Midwest golf trophy. Gillett attributed his success to the excellence of the greens over which he putted to make up for deficiencies in other departments of his game.

Plan Two-Day Greenkeeping Conference This Month at U. of Wisconsin

HORTICULTURAL department, University of Wisconsin, again sponsors a two-day conference for greenkeepers, green-chairmen and others interested in turf culture, to be held this year on February 27 and 28. Principal speakers in the well-rounded program will be John Monteith Jr. of the USGA Green Section, and O. J. Noer, Sewerage Commission's maintenance consultant.

Greensmen, club officials, and others having an interest in the problems of fine turf culture are urged to attend. James G. Moore, of the Horticultural dept. of the University is the man in charge.

Amherst Greens Course Draws Record Enrollment

A WINTER course for Greenkeepers at the nation's oldest school for greenkeepers and golf maintenance men is now in session at Massachusetts State College, Amherst, Mass. The school, which will run until March 16, has drawn a record enrollment this year with students registered from ten states and Canada.

The courses are so arranged that all the factors of successful turf management are discussed individually, and particularly in their relation to one another. The course of study at the school includes the following subjects essential to the modern greenkeeper and general maintenance man:

Landscape Appreciation, Botany for the Greenkeeper, Water Systems (with particular reference to the relation of size of pipe, pressure, and nozzles to the flow and delivery of water), Drainage, Equipment and Supplies, Managerial Problems, Grasses and Turf Culture, Cost Keeping and Analysis, Soils and Fertilizers, and a study of plant diseases and insect pests.

A very large and complete model of a golf course is maintained to serve as a laboratory and provide students with first hand knowledge of their studies.