

Survey '67:

Turfgrass Management Training, Part 1

From "brushup" short courses to two-year technical programs, from four-year undergraduate courses leading to B.S. degrees to research-oriented postgraduate studies, colleges around the country are stepping up their turfgrass management training programs in the face of heavy demand for graduates. On the following pages, and in coming issues, WTT surveys turfgrass programs and the specialists behind them.

University of Illinois, Urbana, Illinois



Dr. J. D. Butler: In the past few years we have added turf study to our curriculum and have begun giving it major emphasis.

Turf training at the University of Illinois is a cooperative effort between the Departments of Horticulture, Plant Pathology, and Agronomy. Under the direction of J. D. Butler, Assistant Professor in Turf Management, Illinois' program offers a six-week Winter Short Course, with a certificate given, and a four-year undergraduate course leading to a B.S. in ornamental horticulture, turf management major.

Undergraduate study has evolved over a 10-year period, while graduate study began about five years ago. Planned for 1968 is an advance six-week short course to update trained turfmen in latest developments.

Short Course enrollment is about 18, with high school graduation required and

work in the turf field preferred. In 1967, the course began Jan. 30 and runs until Mar. 10. Information on future courses can be obtained from the Director of Short Courses, College of Agriculture. Course tuition is \$35 for Illinois residents and \$140 for nonresidents.

Undergraduate students in turf management currently number 10. Admission is possible several times during the year, and requests for information should be directed to the Registrar, University of Illinois. Tuition and fees for the four-year program amount to \$135 per semester for residents and \$425 for nonresidents. Graduate admission is by special arrangement.

Turf instructors at Illinois are Drs. T. K. Hodges, D. P. Taylor, M. C. Shurtleff, F. W. Slife, and J. D. Butler.

Iowa State University, Ames, Iowa



Dr. Eliot C. Roberts: Opportunities for turf graduates are excellent. We are able to fill only 25% of openings referred to us.

Iowa State's turf training program is jointly sponsored by the Departments of Agronomy and Horticulture. Students majoring in either department can elect this specialty. The four-year program grants a B.S. in agronomy or horticulture with turf management as a Specialized Training Option requiring 14 credits. Though undergraduate study is emphasized, work towards M.S. and Ph.D. degrees is also offered.

Dr. Eliot C. Roberts is in charge of the program, and is assisted in teaching by graduate students and by Professor A. E. Cott, Extension Turfgrass Specialist. Courses in agronomy and horticulture are taught by staffers in these subject areas. Specialized turf training began at Iowa State in 1959 and has produced 35 grad-

uates with B.S. degrees, seven with M.S. degrees, and now has two candidates completing Ph.D. requirements.

Undergraduate enrollment usually varies from 20 to 30 students, with five to eight in each class. Iowa State is on a quarter system; students can enter the course at the start of any quarter: first week in Sept., Nov., Mar., and June. Applications should be made well ahead of anticipated starting dates—two quarters is recommended.

Requirement for entering the program is acceptance at the University. Tuition and registration fees for an academic year (three quarters) come to \$345 for Iowa residents and \$930 for nonresidents. Contact Dr. Roberts for general information and the University's Registrar for entrance details.

University of Maryland, College Park, Maryland



Dr. Elwyn E. Deal: Opportunities for turfgrass management graduates are outstanding for all phases of turf work in Maryland.

Two-year and four-year undergraduate programs, as well as graduate study are offered by the University of Maryland. Four-year and graduate programs are administered by the Department of Agronomy; two-year program by the Institute of Applied Agriculture.

Dr. Elwyn E. Deal directs Maryland's four-year turf training, which leads to a diploma, and also graduate study towards M.S. and Ph.D. degrees. Newer two-year course, offering a certificate on completion, is directed by George D. Quigley. Maryland's undergraduate turf studies began about 1956, while graduate training was instituted in 1964.

Two-year training began in 1965, and currently there are seven sophomores (the first class) and 14 freshmen enrolled. The

Institute of Applied Agriculture, designed to provide technical agricultural training beyond the high school level, also offers programs in Arboriculture and Park Management, and Horticulture and Landscape.

Dr. Deal teaches graduates and four-year undergraduates, Douglas T. Hawes (turf management) and Breck Debnam (agricultural engineering) handle teaching of two-year students. Tuition for all Maryland undergrads, including fees, totals \$346 for two semesters to residents. Assistantships for graduate study are available. Entrance to four-year course calls for high school diploma and entrance exams. Diploma and approval of Director are needed by two-year students.

Address four-year and graduate inquiries to Dr. Deal, two-year inquiries to George D. Quigley.

Michigan State University, East Lansing, Michigan



Dr. James B. Beard: Trained professional turfmen are in great demand in all management areas with salaries well above average.

Michigan State's Department of Crop Science offers two-year technical training in turf management, four-year undergraduate study, graduate work for M.S. and Ph.D. degrees, and short courses. Dr. James B. Beard directs turf education, with John King coordinating the two-year program.

Four-year graduates receive a B.S. majoring in turfgrass management. Students may specialize in the science, business, or general aspects of turf, preparatory to graduate study, sales-oriented careers, or field work. Graduate study has been offered since 1945, four-year study since 1965, and two-year technical training since 1966. Short courses began in 1930.

Entrance to two-year program requires a high school diploma and carries tuition

costs of \$118 per quarter for Michigan residents and \$340 for nonresidents. Yearly starting date is Sept. 20. Dr. Harold Ecker can provide additional information on this program, which has a current enrollment of 15.

High school grades, rank, and courses taken determine admission to the four-year undergraduate program. Tuition is \$108 per quarter for residents and \$290 for nonresidents. For information on 1967-68 admission, write Dr. Beard. Professor Leyton Nelson is contact man for MSU's short course.

Turfgrass teaching responsibilities are shared by Dr. Beard, Dr. Paul E. Rieke, John King, and others in supporting departments.

Purdue University, Lafayette, Indiana



Dr. W. H. Daniel: It is reported that Purdue's graduating turf majors have the highest initial pay of any undergraduate group.

Dr. William H. Daniel, Professor in Agronomy, directs turf training at Purdue University, where undergraduate work has been an outgrowth of research and graduate study that dates back to 1943-45. Four-year undergraduates work toward a B.S. in Agriculture with a major in turfgrass management. This program was initiated in 1952 and has graduated more than 50 students.

Purdue's courses are designed to prepare students for positions as turf superintendents, sod nurserymen, agricultural salesmen, grounds supervisors, and related lines of work. Undergraduate enrollment currently stands at 20; there were five graduates in last year's class. Turf teaching is done by Dr. Daniel. Graduate enrollment usually numbers four students.

Entrance requirements of the University must be met by students in the turf program. Tuition for Indiana residents is \$165 per semester; details are outlined in the catalog, which can be obtained from the Registrar, Purdue University. Early application for enrollment is advised, with Aug. 1 the practical deadline.

Students in turf management at Purdue are encouraged to gain experience in turf research and practical field work prior to graduation. Work during at least one school year in the research program and one or two summers spent in some management and maintenance activity are expected of undergraduates.

Contact Dr. W. H. Daniel, Turf Specialist, Department of Agronomy, for more information on Purdue's turf program.

Rutgers University, New Brunswick, New Jersey



Dr. Ralph W. Engel: Salaries for turf graduates are very good, commensurate with experience, attitude, ability, and education.

Rutger's four-year undergraduate program leads to a B.S. from the College of Agriculture and Environmental Science. Students follow the plant science curriculum and take their electives in turf management subjects. The program is directed by the Office of Resident Instruction, with Dr. Ralph Engel, Professor of Turf Management, as principal teacher and student advisor.

A short course, consisting of one ten-week program a year for two years, is also offered for professional turfmen, landscapers, and others. This program began in 1960 with other, shorter courses initiated in 1928. A certificate is awarded those completing the ten-week technical program, which is already underway for 1967. Plans for 1968 call for an early

January starting date.

Four-year turf study at Rutgers began some 30 years ago. Current enrollment is eight, with college entrance examination and favorable high school standing required for admission. Yearly tuition is \$400 (\$200 per semester). Rutgers also offers graduate programs in turf management leading to M.S. and Ph.D. degrees.

Undergraduate course of study includes such subjects as soils and their management, land planning and utilization, lawn management and fine turf production, plant breeding, principles of weed control, etc. Numerous staff experts cooperate in teaching turfgrass management students.

Requests for information and admissions can be directed to the Office of Resident Instruction, Rutgers University.

Texas A & M University, College Station, Texas



Dr. George G. McBee: There are unlimited opportunities in this area for graduates who are trained as turfgrass managers.

Turf training at Texas A&M comes under the Soil and Crop Sciences Department of the College of Agriculture. Students can enroll in agronomy or plant and soil science curriculums with a major in turf management. Turf and related courses are then worked into the program, which offers a B.S. on completion.

Directing turfgrass training at Texas A&M is Dr. George G. McBee, Assistant Professor. Initiated more than 20 years ago, the Texas program also offers studies towards M.S. and Ph.D. degrees. Curriculums for advanced studies are individually outlined.

Enrollment in turf is currently eight. The course has produced approximately 25 graduates in the past 10 years, with three graduating in the last class. To enter the

turf program, students are required to meet University entrance requirements and have an interest and desire to work in the turfgrass field. On-the-job training can be, and generally is, included as an undergraduate requirement.

Starting dates in 1967 and 1968 fall in Feb., June, and Sept., and early application is suggested. Requests for general information or admission data can be directed to Dr. McBee or to the University's Registrar. Tuition costs come to \$50 for each full semester, not including fees and other expenses.

Several professors in Texas A&M's Department of Soil and Crop Sciences teach subjects relating to the turf program. Cover photograph shows the Plant Science Building, where much of the turf training is conducted.

Virginia Polytechnic Institute, Blacksburg, Virginia



Dr. R. E. Schmidt: Virginia Tech cannot supply the state demand for trained turf ecologists. It is an opportune and challenging field.

Study options in science (for those anticipating graduate work), technical aspects, and business are offered four-year undergraduate students in Virginia Polytechnic's turfgrass management program. Under the direction of Drs. R. E. Blaser and R. E. Schmidt, Professor and Assistant Professor of Agronomy, the VPI program is conducted within the Department of Agronomy, with the Departments of Plant Pathology and Physiology, and Horticulture cooperating.

Four-year undergraduate and graduate programs are offered, leading to B.S., M.S., and Ph.D. degrees in agronomy with a turf ecology option. Graduate degrees are basically research degrees, and the course of study is selected primarily on student interests.

VPI's turf program was started in the late 1950's, with the first formal course being offered in 1961. There have been about 10 graduates; enrollment now stands at 14. Admission to Virginia Tech. is required for turf study, and students must be high school graduates who have satisfactorily passed college entrance exams.

Starting date for 1967's class is Sept. 13. Applications are accepted any time, but to assure favorable consideration, they should be made six to nine months ahead of anticipated attendance date. Tuition, paid only by nonresidents, is \$140 per quarter. On-the-job training is included as an undergraduate requirement.

Requests for particulars on Virginia Tech.'s program should go to Dr. H. L. Dunton, Head, Department of Agronomy.