Turfgrass research

by J. Escritt, Director, Sports Turf Research Institute

Research may be defined as "careful search or enquiry after or for something" or alternatively, "endeavour to discover facts by scientific study of a subject". The word is used rather carelessly by some people who say they have carried out research if they have merely looked something up in an obvious reference book such as a dictionary!

We at Bingley do carry out a certain amount of research related to the first definition, i.e., we study reports of other people's work. Obviously in the second meaning, i.e., the scientific study of our subject. Scientific research can be of more than one kind—so-called pure research is aimed at elucidating the facts of science and the reasons for them, whilst applied research is aimed at providing solutions to practical problems. As regards turf production and management, most of the research throughout the world (including our own) is obviously of the applied kind. Indeed for many years our emphasis (in keeping with the times) was on the maintenance of existing turf areas rather than on the construction of new ones.

The earliest known research on turfgrass was in the U.S.A., plot trials having commenced in Connecticut in [Continued facing page]
1885 and at Rhode Island in 1890. The Sports Turf Research Institute in Bingley was not set up until 1929! In much more recent years important turfgrass research centres have been established in Western Germany and in Holland.

There is, of course, a New Zealand Institute for Turf Culture, an Australian Turfgrass Research Institute and a South African Turf Research Association.

A marked interest in turf research has now developed in Canada, Japan, Russia, Austria, France, Switzerland, Sweden and to some extent, in Denmark. By far the greatest amount of turfgrass research work has, however, been carried out in the U.S.A., where most of the research is now carried out at the Universities.

Several British Universities are now taking an active interest in some aspect or other of amenity turf, frequently related to the ecology of various situations other than sports turf. In the Botany Department of Liverpool University, Professor Bradshaw has several workers concerned with turf work, an outstanding interest being reclamation of derelict land including selection of grasses suitable for land with mining waste contaminated with lead for example. The soil department of Aberystwyth University is doing very useful work on soil, on sports turf drainage and, I believe, some work on sports turf grasses.

We must not forget, of course, the contribution made by commercial research. Much of this may be of more value to the firm concerned than to users in general but this is by no means always true.

The Sports Turf Research Institute at Bingley has, however, long been [Turn to Page 19]

[Image of advertisement]
recognised as the main centre for amenity and sports turf investigations in the British Isles.

**The Institute**

The Sports Turf Research Institute was started up by golf (as the Board of Greenkeeping Research) in 1929 but since 1951 it has had its present title and has been managed by a Board representing all the major sports. By far the greatest part of the income of the Institute is derived from subscriptions and fees from individual clubs, local authorities and other organisations using our advisory services. The difference between what the various organisations pay and what it costs to provide the advisory service to them has had to provide the main financial support for the research work and this is supplemented to some degree by contributions from the research fund, by some support from the Trade in general and by contributions from various firms interested in any particular research we are doing. Lack of money for research is, and always has been, a limiting factor at Bingley—it has been difficult or impossible to get people to understand the scale of expenditure required. Of this, more later.

One trouble with research is, of course, that it is never finished. When one has investigated a subject fairly fully at any given time it is not long before changing circumstances make it necessary to look into the whole thing again. I have studied past Journals and Reports of the Institute and you may be interested in a catalogue (not complete) of work that has been done. You will see that much of it needs to be repeated from time to time, not necessarily because the work was inadequate but because circumstances have changed. In this connection, of course, it has to be appreciated that the general approach to production and maintenance of turf is much different from what it used to be. At one time people’s ideas of the cost of a new playing field, for example, were tuned to the idea of a few pounds to mow down a farmer’s field. Nowadays costs of up to £2,000 per acre for playing field construction are accepted as normal and an eighteen hole golf course may cost £50,000—£100,000. People are also prepared to face much higher costs on maintenance in order to achieve higher standards and make possible the increased use which extra leisure time brings about.

Most of our results have been obtained at Bingley but from time to time there have been trials at outside centres, i.e. on practical sites.

**Research trials and findings at Bingley will be described in future issues.**

**NEWS**

ONE of the largest educational conferences and shows in the golf profession will officially open its doors on February 16, 1975 at The Rivergate in New Orleans. The Golf Course Superintendents’ Association of America’s (GCSAA) 46th Annual International Turfgrass Conference and Show will offer superintendents, club officials, golf professionals and any one else interested in the profession an inside view of new developments through a combination of educational assemblies and an industrial exhibition.

Although the annual activities of this golf turf management profession will actually begin February 13 in Pensacola, Florida, with the GCSAA Championship Golf Tournament, followed by Pre-Conference seminars on pesticide usage and financial management in New Orleans, February 15 and 16, the conference will officially begin on Sunday, February 16 and run through Friday, February 21.