

Golf Course Construction

By Kenneth Welton

Golf course construction is often regarded as merely that process of taking soil from one place and piling it in another in such a manner that when it is finally smoothed out it will conform with the more or less definite plans of the course architect. Unfortunately, in many cases this is all that actually happens in construction work. Good golf course construction should be more than molding of earth into prescribed forms as specified by an architect. After the course takes form it must be covered with turf, and this turf must be maintained under the trying conditions of every-day play. In construction work every effort should therefore be made not only to provide the course with a thick covering of turf, but to make every possible provision for the welfare of that turf in the years to come.

THE AIMS OF GOOD CONSTRUCTION

It must be remembered that the grass in turf on golf courses is often growing under extremely unnatural conditions. When any living thing is grown under unnatural conditions it is necessary to make allowances in the way of providing as nearly favorable environments as circumstances will permit, else difficulties will soon arise.

Grass, like animals, requires food, air, and water. Unlike animals, plants are unable to move about to alter their environment, and the necessities for existence must therefore be provided where plants are placed. It is not sufficient to provide only one or two of the requirements, for if one is absent all others are of no avail. One frequently finds men struggling to keep turf alive by means of heavy applications of chemicals to provide food. They soon find that such applications are useless if, due to saturation of the soil, all air is excluded from the roots.

Food and water can be applied in proper amounts any time after the turf is established. On the other hand, it is a difficult and costly undertaking to provide for the removal of excess water and the aeration of the soil any time after the course is built. Soil conditions should be made as nearly perfect as possible before any seed is planted. To accomplish this it is necessary to understand some of the fundamental principles involved in soil structure and plant growth. In this discussion we can merely mention some of these elementary principles.

Soil, for convenience, is classified according to the fineness of its particles, ranging from the fine particles of clay to the coarse particles of sand or gravel. Also, soil contains decaying vegetable or animal material, which is commonly referred to as humus. There are also present in varying amounts a great variety of chemicals in the form of salts, alkalies, and acids. These chemicals furnish food for the plants. Soil also contains countless numbers of bacteria and other microscopic animal as well as plant life. These organisms as a rule are beneficial in breaking down dead organic material and in making plant foods available. Thus some of the organisms found in manure help to decompose it and improve the soil wherever it is applied. Other microscopic organisms may be harmful and cause