## What Use Can Be Made of **Lessons of Experience**

By JAMES E. THOMAS Supt., Army and Navy Country Club, Arlington, Va.

Experience is regarded as the best and often the costliest teacher. And after the experience many golf course superintendents had last year they will concede that it is the most painful teacher.

The only way we can win is by not having experience teach us the same lesson twice. So what did a brutal season teach us about troubles we might avoid in the future? This subject has been frankly discussed at superintendents' meetings. Unfortunately some highly important answers that we learned can be applied only by order of club officials and demand expenditures that will be economies over a fairly short term of years.

The summer of 1952 in the Baltimore and Washington district was a most trying one for golf courses and tested the skill and alertness of superintendents to the utmost. An excessively wet spring followed by a hot and humid summer caused the loss of grass on many a putting green; some situations were minor

while others were quite serious.

Hot weather troubles can be greatly minimized by good management practices and proper construction. At the August meeting of the Mid Atlantic Association Golf Course Superintendents troubles of the season came up for much discussion.

One point clearly made was that good construction and design simplifies maintenance. It was shown that in order to create a beautiful and sporty layout very often no thought was given as to what bearing it would have on future maintenance and upkeep. Club officials and superintendents can fall heir to troubles that are not of their own making, yet they are expected to iron them out with great ease and no difficulty.

#### **Built-in Headaches**

Golf organizations usually receive as a finished product a golf course that contains many built-in headaches that could have been avoided during the construction period. Some of these are the placing of greens in pocketed areas that shut

off air currents and sunshine (thus making conditions ideal for fungus attacks); failure to remove trees adjacent to putting surfaces, such as elms, willows, maples, and cottonwoods. Trees having lateral shallow root systems rob greens of moisture and plant food and cause bare and localized hard spots.

The key to 90 per-cent of all summer troubles on a golf course is drainage. A companion to this is the misuse of applied water. If one were to check the areas that came through 1952 successfully he would find that those locations were kept on the dry side, with only enough water being applied to keep the grass in a healthy growing condition.

Many a surface that appears perfect from the ground level contains hidden troubles underneath. Especially is this true when the top soil is impervious to water percolation and contains large amounts of organic matter such as peat or humus. The last two mentioned components are part of a good soil mixture but nine times out of ten their use is The removal of gravitational overdone. water is far more important than its retention.

The fundamentals of good green construction are: 1, a good sub-soil grade; 2, tiling; 3, a proper soil mix; 4, perfect surface drainage; 5, the proper selection of grasses. Sub-surfaces are the foundation for the building, and if weak the structure does not weather the elements very well.

The main requirement of a good subgrade is that it must be true and level, free of pockets or hollows that could become storage basins for excess water, which serves no good purpose and deprives grass roots of needed oxygen. Plants need air to live and breathe. Without it, they die of suffocation. They can and will not tolerate water-logged soils when temperatures are high.

The next step is to lay an adequate tile system throughout the foundation. If it is to function properly, gravitational

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# "AGRICO is ideal for producing good turf"



"I have learned in my 3 years' experience with AGRICO COUNTRY CLUB and AGRINITE that they are ideal for producing good turf," says Norman Mucciarone, Superintendent at Lexington Golf Club, Lexington, Mass.

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water must be able to reach the drainage lines. The soil profile needs to contain porous materials, such as sand, sufficient to permit free seepage. The faults of over-drainage are easily corrected; those of insufficient drainage mean reconstruction, or toleration of poor conditions.

A good topsoil for putting greens will more often be a made mixture, rather than a natural one. It needs to be friable and mellow, one that will not compact under hard usage, and which is receptive to the easy entrance and disposal of air and water. Both are necessities.

The actual surface of putting areas should drain in several different directions and hollows and depressions are to be avoided. Gentle undulations are preferable to high sharp mounds that dry out easily. The contouring should provide the maximum amount of cupping space, which is needed where play is heavy. The question of what are the proper grasses to plant mainly depends on the locality involved and on a selection of varieties that do well in the region.

If the above conditions are taken care of properly during the building of a golf course, summer troubles will no longer be the major problem that they are now. Thousands of dollars are added annually to the cost of maintenance because the original job was not done right.

#### Members' Cooperation Needed

Club members do not always co-operate with their Green committees and superintendents in the establishment of a satisfactory playing sod and turf. Sometimes the members' views and desires are not consistent with good course operation. They expect to find perfect conditions 24 hours a day for 365 days a year; bad weather is never considered as a part of the picture.

Golfers can often make it difficult for a superintendent to carry out sound maintenance practices. They demand that greens be kept saturated with water so that all of their shots will stick and hold regardless of how played. This excludes air from the soil, causes a shallow root system and also aids the development of compaction. A demand for higher cutting so as to produce a slower playing green speeds up the building of a thatched surface. When this is allowed to occur players, maintenance men and grass plants suffer with each other.

Members will derive a lot more enjoyment from their games throughout the playing season by occasionally tolerating for a brief period a few inconveniences. This is better than having to stand by and watch the renovation of putting greens for several weeks.

An alert superintendent plans his maintenance schedule in the early months of Spring to avoid anticipated trouble during the hot and humid months of July and August. His first desire is to establish a strong and deep root structure. He does this through aerification, proper fertilization and correct watering practices.

The development of thatch is another danger to be watched. Grass must not be allowed to become nappy or matted. A density of excess grass, stems and roots can become so thick that water, food and air cannot penetrate through the felt-like mass to the earth below. The situation if allowed to exist provides an ideal breeding place for scald, disease, insects, chlorosis and localized hard spots. Should greens enter hot and wet weather in this state trouble is ahead. This matted covering must be removed, then must follow close mowing. The operation needs to be repeated until all signs of fluffiness have disappeared.

### North Cal PGA Sets New Highs in Junior Golf

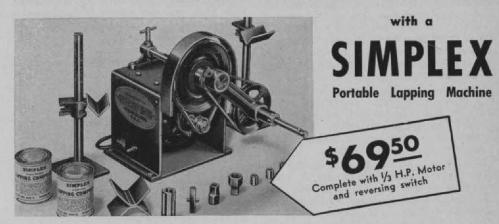
Report of Northern California PGA Junior Golf Promotion committee, headed by Dewey Longworth, Claremont CC, shows that 41 pros in 1952 taught 3,156 pupils. There was an increase over 1951 in PGA members giving free lessons to juniors, number of juniors taught and number of junior tournaments. There were 76 junior events in which pros were moving factors. At 10 colleges and 12 high schools in Northern California juniors received free instruction from PGA members.

The scoring standard and swings showed marked improvement.

New tournaments were added to the junior schedules, among them a projunior event. Pros said there's more interest in junior girls' golf than ever before.

The NC PGA report also noted that the Olympic Club's junior program included the election of six juniors to the club. The pros hoped that more clubs would cooperate in the junior campaign by extending limited playing privileges to foungsters.

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