

Third dimension analysis

Does your landscape enhance your course?

By Jeanne A. French and R.P. Korbobo

(Editor's note: This is the first in a long series of Golf Course Landscape Design articles written to strike awareness of the ultimate role landscape plantings can play in making a course a visual showplace. Future articles will describe, in detail, plantings in areas of the course as described on the landscape drawing in this first article.)

Your golf course is a living organism. It is slowly and constantly changing. There is a great and profound line in the Rutgers University alma mater song that goes — "ever changing yet eternally the same". That thought describes your golf course" to a tee."

It is changing every second of the minute, the hour, the day and the year. The trees grow larger. Some are struck by lightning. Others are twisted and broken in wind and ice storms. Occasionally they die from disease and insect attacks, or poor growing conditions. Man sometimes cuts them down to make way for roads, ponds, bridges, etc., etc. These changes are easy to see by an observing person. However, sometimes we are all so busy we fail to recognize the change.

It might surprise most conscientious superintendents to realize or to admit that there is more to their golf course than just turf, sand traps and water. We ask you to "look up". When you do look up, you will see that there are trees on your course. You probably have looked at them but have you really seen them? Perhaps

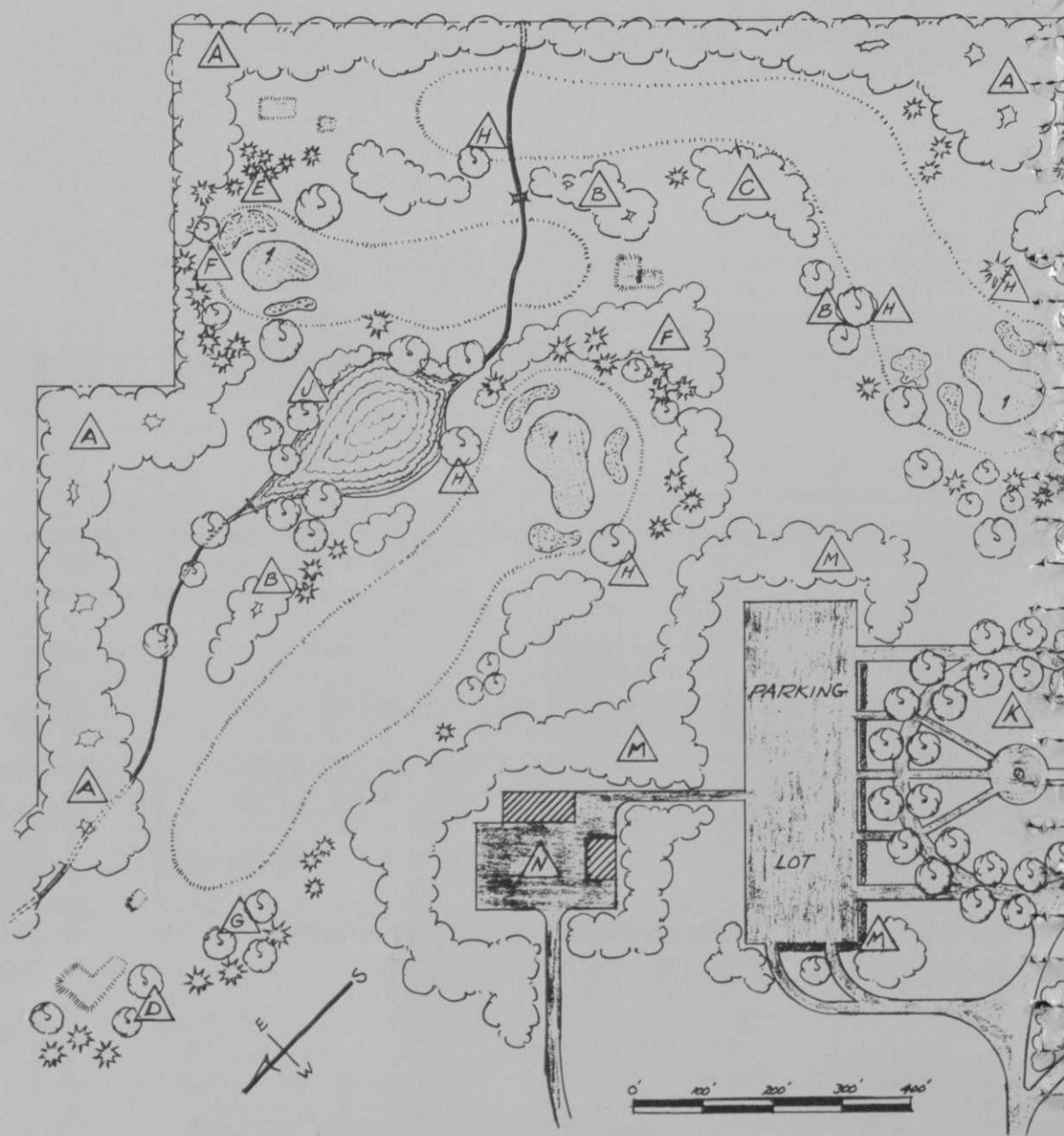
you have seen them but never really thought too much about their true function on the golf course. Trees are a vital part of your golf course. Naturally there are exceptions to this rule and you don't have to think too hard before you can remind us of the golf link in Scotland or even a few of them right here in this country. I have heard that they recently completed a golf course at or near Colorado Springs in Colorado that will practically be treeless. If you have ever tried to grow trees in that area, you

can understand why this is the natural way to go with a golf course in that particular climate.

Trees are not only important on the golf course itself but they play an important role in such areas as the main entrance, the entrance drive, the swimming pool area, the tennis courts and as well as the paddle courts. Not too often, but at a few clubs there are gardens of quite some extent where-in trees play an important part.

If your club has an outdoor dining area, a knowledge of trees that will

This drawing shows the golf course divided into areas the author plans to cover in detail in future articles. They are: A — Boundary plantings; B — Partition plantings; C — Dogleg plantings; D, E — Tee plantings; F — Background for greens; G, H, L — Framing trees; J — Water plantings; K — Garden areas; M — Parking and Work area screens; N — Superintendent work center; P — Picnic grove; R — Other screen plantings; S — Kitchen service area.



shade such a critical area is absolutely essential if you don't want to make some horrible long-lasting mistakes. Trees are the third dimension on a golf course. A course without trees would be like a house with just the flat floor. There would be no walls or ceilings. That wouldn't be much of a house. Think about that for a while. Would you like to live in a house where you had no privacy and one room was not separated from the others. You could be sitting in the dining room at the table eating while all other phases of life were going on in each of the remaining rooms. That's not what we would call a picture of privacy.

The trees on a golf course, if used properly, create what the landscape architect calls "a spatial relationship" between man and the immediate world around him.

Picture yourself standing around

talking to other people on a brick terrace during an outdoor cocktail hour. The brick terrace is part of the overall landscape design. Therefore it should have a feeling of an enclosure around it. This enclosure need not be a ten-foot high wall or a complete visual barrier to some other part of the garden. It might only be a hedge or fence, or maybe a wall from two to four feet high. You would now have a feeling that you were in a given area, designed for a particular function. This same thing happens on the golf course when you have trees along the outer property lines and trees between the fairways. These are considered the boundary plantings which give you privacy from the general public. Trees in the areas between the fairways would be considered partitions which would provide at least partial privacy from the adjoining fairway.

Once this was established, the golfer would either consciously or subconsciously have a spatial "feeling" that he was in a purposefully designed space for the sake of playing that particular golf hole. It would give reason to everything there. Such trees would be fulfilling a design function. The golfer would feel that he and his playing group were practically alone in this given space. If you don't get this feeling on your golf course, there is something lacking in the landscape design. As we travel around from course to course, it is easy to immediately size up a tree population as being too few, too many, or just about right.

Most courses have too few trees. We say this with the knowledge that too many trees can slow the game of golf. Therefore we inform you quickly that we are aware of the fact that there are basically three types of golf courses, each serving a particular purpose. We would never place the same number of trees on a public course as we would on a private golf course. The amount of trees on a semi-private course would fall somewhere between the first and the last.

We all know that the object of the public golf course is to get as many rounds of golf through each day as is possible. This is pure dollars and cents economics. However, we also know that if properly selected trees are placed in strategic locations on a public golf course they would have very little to do with slowing a round of golf. Tree selection will be covered in a later article in this series. It is tremendously important.

The semi-private club should perhaps have on an average of about 25 to 35 trees per hole. In this particular instance the golfers usually have a lower handicap than those playing the public courses. The private club on the other hand, to really look luxurious, should not be limited by any predetermined number of trees.

Of course, there is all the difference in the world between an old established course (30 years or more old) and a relatively new one. It takes about 20 to 30 years for nursery-grown trees to reach what we would consider early maturity. Naturally, if a tree can grow to be 300 years old, this is not an accurate statement. For functional purposes on a golf course where trees might grow at an average of between 15 to 30 inches in a year, you can see how quickly a tree that was 10 to 12 feet tall at planting time can reach a height of 30 to 35 feet. Any tree that high can already serve its intended purpose on a golf course.

There is a great misconception about planting large trees for a quick effect. The tree that is over four inches in diameter at breast height when transplanted will practically stand still for the first two or three years even under the best of growing conditions. Plant the same tree in something less than ideal growing conditions and it may not make much additional growth for the next 5 or 6 years! However, if trees of only 1½ to 1¾, or maybe even up to 2", in caliper at one foot above the ground were planted under the identical conditions, in a matter of 8 or 10 years they would be way ahead of the much larger trees that we just described. This is simply a fact of horticultural life. Some people when told this will not allow it to sink into their cranium. They will go right ahead and waste hard earned money on trying to get a quick effect with big trees.

We are not against the moving of large trees. They can be moved at almost any size if you have the money to pay for them. We are, however, cautioning you that if your budget cannot stand it, you should not waste that kind of money on large trees.

In key situations, such as on a dogleg hole, where the size of the tree or the number of trees become very important, then we may agree that a larger outlay of money for bigger trees in the beginning would be the wisest choice.

On old established courses where we do course analyses, many times we not only recommend additional trees,



but we also suggest the removal of some existing trees. We also frequently call for protecting key trees from lightning strikes. This all becomes extremely important when you understand the function that a particular tree, or group of trees, is supposed to perform for the game of golf as planned by the golf course architect who laid it out.

The entire idea of a golf course analysis was born in our minds many years ago at one of the eastern courses that has been the site of the U.S. Open for quite a few times. This was at a 36-hole layout and the superintendent had keen powers of observation. Dutch Elm Disease was running roughshod over American elms all through New England at that time. The superintendent was also very good at keeping records. His total of trees lost on these 36 holes astounded him one year when he realized he was averaging a loss of 90 large trees per year! This as we said was when the Dutch elm disease was at its peak. Some of you may be in the area where the Dutch Elm Disease is just arriving. You can imagine what might happen on 36 holes if perhaps 50 percent of your trees were American elms.

We were called in to analyze the situation to see what they might do in the future to avoid a naked or half-naked course. They wanted to know the answers to such questions as — Shall we start our own tree nursery? What kind of trees shall we use? What size would they grow to be? What size shall we buy to plant? How much will they cost? And many other horticultural questions that go along with such a project. In spite of the fact that they were losing so many trees we even called for the select removal of a few more. This may sound ridiculous but it was a large layout and some trees that were separating the two courses were blocking beautiful distant views either from one course into the other or from one course to the mountains that were just above the layout. So you see it is not a case of pure function all the time. Aesthetics also enter the picture. There is an expression — function first and the form follows. We like to say function first, aesthetics follow.

As for the function of trees on your golf course, we would say there are basically about ten. The first, and probably most important, would undoubtedly be the boundary plantings. These trees would ultimately give you a sense of privacy from the residential, business, or industrial properties

bordering your golf course. Before WWII this was generally no problem at all since most golf courses were out at the edge of town, or if they were not, the private land around them laid idle. When the building boom started and urban sprawl resulted, many golf courses found that the trees they had assumed belonged to them along the edges of the golf course really were not theirs. When accurate surveys were made and the bulldozers moved in to flatten the landscape for economical building conditions, the golf course members were shocked to find that they were caught so to speak "with their plants down".

Most golf courses in the old days were constructed on at least 145 acres or more of land. Today with the price of land so high, some courses are being built on quite a few acres less than 145. If you have over 150 acres you are in luck. Every acre over 150 makes it even better. If you have more than 150, you can have a rather deep boundary planting of trees in order to assure year-round visual privacy. How close these trees would be placed to each other would depend upon which part of the country you live in as well as the selection of the trees. This might vary immensely.

A second function of trees is that of "partition plantings" between fairways. This, as mentioned earlier, would be similar to the inner walls of a house or building. Such walls would separate one room from the other. However, we don't recommend a solid wall of tree trunks and foliage. Many times large areas are left open so that the view across the course can include interesting scenes. Other times, areas may be left relatively open due to nearness to impact areas from the drives as well as the second shots on the longer holes.

The basic reason for the partition plants is to psychologically and physically separate one hole from the other.

A third function of trees would be in the areas around some of the tees. Too often we see golfers sitting or standing in the boiling sun awaiting their turn to tee up. This is a common site on par three holes where groups can gang up on a busy day. People should have access to shade either partly on a tee or very near to it. Of course, this has to be done very carefully because of root growth and the shade affecting the health and vigor of the turf on the tee.

Another area for trees is at the beginning of certain holes where



sometimes only two trees (but most times a few more) can be strategically located so as to enframe the picture of the fairway ahead from the tee. This is extremely important when it comes to pure aesthetics. All of these thoughts will be expanded in detail in subsequent articles.

The effectiveness of dogleg holes on a course depends almost entirely upon trees. We know there are exceptions to this statement but, generally speaking, the dogleg isn't worth much unless it is guarded at the joint of the elbow with a large defiant or challenging mass of foliage of some sort. Many times the opposite side of the fairway on a dogleg must be strategically designed with trees or traps in order to catch the long ball hitter who fails to place the ball around or beyond the bend.

A sixth reason for having trees on a course is probably the most important both from a functional standpoint as well as aesthetics. This is the one that is most often absent. It is namely to



course. They will be discussed in future articles.

At various places on certain courses there is a need for planting some trees to insure the safety of the golfers on the course. This usually occurs when the course is "tight" due to a lack of acreage or due to terrain features that practically demand that some of the tees and greens shall be very close to each other. In other cases a green or tee is very close to an impact area of hooks or slices from the tees. You must know the history of the course and the general flight of the balls plus a great amount of knowledge concerning selection of the

an adequate, as well as an attractive, work-building complex and; (2) provide an effective planting screen so that the entire area is practically hidden from view.

You have mounds of soil, sand, gravel, etc., to deal with. There are vehicles that must be parked outside for long periods of time due to the fact that housing for these is too expensive. Add to this the piles of brush and debris from your regular working process. All of this is essential to the proper maintenance of a golf course. No matter how neat this work area is kept we do feel that the golfer should not be able to see it from the golf course.

This article, a first of a series, is written not as a "how to do it" project but instead as an inspirational piece to awaken you to a new awareness of your complete golf course. If you are not a fair golfer then much of what follows in succeeding parts of this series may not seem too important to you. It is absolutely necessary that anyone, either a professional or amateur, who wants to do landscape work on a golf course should not only be a good golfer but also a real student of the game. If they are not then they can make horrible mistakes that will last for many generations.

We also urge all superintendents to visit and play as many different courses as possible.

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In his long and varied career as an Extension Specialist he has accomplished much and has made many friends across the nation. However, the game of golf and the golf course itself intrigues him most of all at this phase in his life.

The authors have helped to improve the landscape appearance on dozens of golf courses and at the moment almost all of their practice is with golf course analyses.

creat a suitable and attractive background for as many greens as is possible. Of course the ideal would be to have enough nonplay area behind all 18 greens so that every green could be as a jewel in a perfect setting. However, as anyone can see when travelling from course to course, this is almost never true. You will probably have to have or own close to 180 acres for 18 holes in order to properly develop a suitable background for all 18 greens. When we say suitable we mean one with plenty of space to do the planting. Frequently we can build a background for a green but it is of necessity a rather shallow planting.

Many courses have at least one water hole on them. This is still another place for the effective use of trees. Many times flowering shrubs can be used near or in conjunction with the water hole because part of the shoreline is usually in a nonplay situation. You may have noticed that we have not mentioned anything about shrubs or flowers on the golf

proper trees for such protective tree plantings. One thing can quickly be said here without going into any great detail and that is always try to avoid a straight line of trees in these tight situations. If you think hard enough you can usually avoid such stiff lines.

Off the playing area you find other reasons for using trees. These areas include such amenities as the main entrance from the public highway and then, of course, the driveway up to the clubhouse. Trees can also screen the parking lots. The clubhouse, ideally, should be framed with trees to be seen by the guests as they drive up the main entrance. And then too, we must include the tennis courts, paddle courts, swimming pools, picnic areas, etc., etc.

Last of all, but certainly not least, we should not overlook the superintendent's work center. No amount of money in the budtet can keep these areas looking like a well groomed part of the course. Therefore, the next best steps that can be taken are: (1) build