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Landscape Work on Golf Courses

This number of the Bulletin is devoted to a consideration of the landscape problems on a golf course. In many cases the greenkeeper and the green committee are not charged with the work connected with the trees, shrubbery, and flower gardens of the club. On perhaps the big majority of American golf courses, however, the entire maintenance of grounds is in charge of those whose duties it is to see that the turf is in proper condition. Whether or not the green committee and the greenkeeper are charged with more than the turf work, they can not fail to appreciate the importance of landscaping the modern golf course if a beautiful course is to be developed. Thanks to the general appreciation of the importance of landscape work, the barren, pasture-like appearance of golf courses is largely giving way to more beautiful and pleasing areas in which one may enjoy his game of golf and some leisure time when the game is over. There are some golfers who maintain that a golf course is no place for trees and shrubs. Such golfers form a very small minority. Although most of the players realize that the golf course is not a place for the indiscriminate placing of large plants, they realize that there is ample space outside of the line of play for some adornment with foliage and flowers. In this number of the Bulletin special emphasis is given to the planting of areas off of the golf course proper, around the club house or shop, and along the driveway from which visitors usually get their first impression of the esthetic value of the course. In another number it is planned to give suggestions for planting more generally around the golf course, where there is available space that can be used to advantage for such work.

The bleak approaches and the destitute surroundings of the club houses in many of our prosperous golf clubs are deplorable. In many cases they are excusable on the basis of financial stringency, but too often they can only be explained as due to an unpardonable lack of oversight on the part of those who have apparently set out to destroy every living thing in their way to construct a golf course. Occasionally one finds a course being built on a natural woody area over which a group of wood choppers have worked indiscriminately in such a way as to give the impression that the area was being cleared for large farming operations rather than the construction of a huge playground with natural country surroundings. Where a course has been the victim of such an unguided construction gang, the only hope of restoring a picturesque setting is to establish a definite policy of landscaping. Nature makes her own beautiful plantings of trees and flowers, but her program is a slow one unless some aid is given by man, who has been responsible for the original desecration. Frequently it is necessary to build golf courses where timber has been cut years ago, where there is little chance to take advantage of existing natural surroundings. Even with the most careful attention given to the natural assets it is usually found that in the construction of the club house and the various parts of the course a certain amount of destruction is unavoidable. In order to make any new development fit in with the natural surroundings it is usually necessary to make some planting, particularly around the club house or other buildings on the course property, and also the driveway. In this number we present suggestions in landscape work from authorities connected with government institutions of the United States and

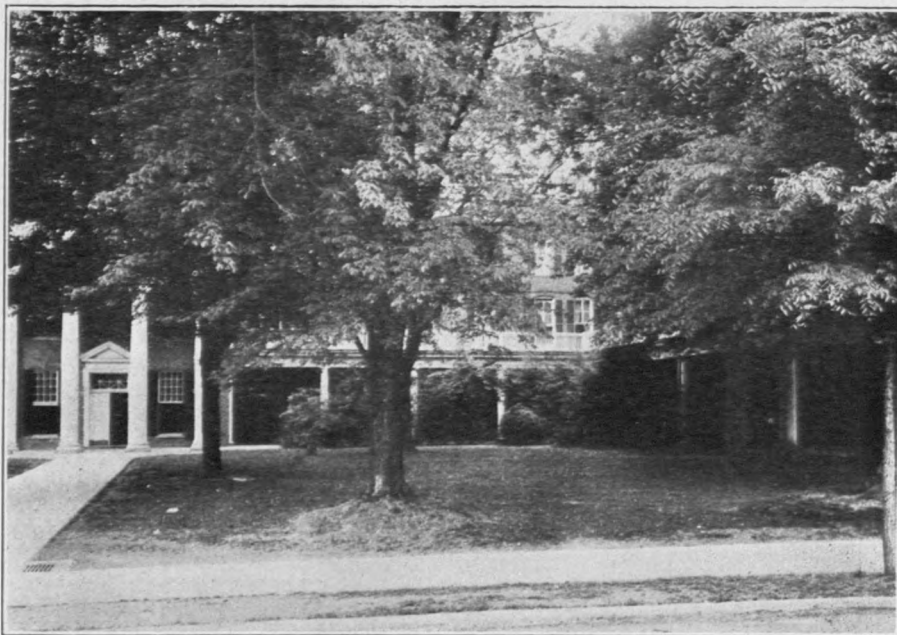
Canada. In both of these discussions attention is called to the value of landscape planting around the club house and along driveways. Both of these contributors have given only general suggestions to serve as guides for those who are interested in the subject. Further valuable detailed advice may be obtained by writing either of these contributors. Another contributor tells of the experience of the Longue Vue Club in beautifying the surroundings of its new club house. The driveway and grounds around the club house at Longue Vue form one of the outstanding demonstrations of landscaping accomplishments about American golf clubs. It is even more striking when one appreciates the short period of time in which the results have been achieved. As pointed out by Mr. MacCloskey, the work at Longue Vue has been in the hands of a separate committee, and supported by special donations from the club members. It is interesting to note that this committee employed a professional landscape architect to make the plans for this work. A great many clubs have members who are enthusiastic friends of plant and animal life who will gladly serve on a special landscape committee and do a great deal of unselfish work toward promoting plans for the beautification of and added interest in the club property. However, it must be remembered that a landscape committee is not spending club money doing this work for the present but rather for the effects that will be in evidence in the course of several years; therefore it is well to seek the very best advice before making any final decisions on the plans. A few trees badly placed may cost very little at the outset and may not be particularly objectionable; however, as the years go by and the trees become larger they may become decidedly objectionable or may entirely spoil the natural effect of the whole planting. After trees have grown for a number of years they are expensive to move, and it is the usual experience that, if some committee has struggled to get trees started on the course, a certain amount of sentiment soon becomes attached to them, and it is extremely difficult to have them removed in later years without creating a certain amount of ill feeling between groups of members within the club. Landscaping problems should be well thought out before any work is started. On the other hand, work should be started as soon as possible in order that the trees and shrubs may have a chance to commence growth without delay. It is not well to try to economize too closely on plans, but rather to economize in the purchase of material in a manner such as pointed out by Mr. MacCloskey. Every nurseryman has a certain amount of planting material that he finds difficult to dispose of for planting about homes, where specimens have individual value. In the massed plantings that can be used on golf courses an opportunity is presented to use some poorly shaped specimens which the nurseryman can well afford to sell in quantities at bargain prices. A golf club usually has some land which it can profitably use as a nursery for trees and shrubs. A small nursery of this type is often as valuable an asset to a golf club as is a turf nursery. Mr. Tregillus, in his article in this number of the Bulletin, has brought out the possibility of moving large trees from woods on the course and also the feasibility of developing a nursery for small planting stock which will be available for replacement in a surprisingly short period of time.

Ornamental Planting on Golf Grounds

By Furman Lloyd Mulford

Bureau of Plant Industry, United States Department of Agriculture

As golf courses are located with so much open space about them, they lend themselves especially well to the creation of beautiful pictures without interfering with the purposes for which they are established. The narrower, restricted reason for a golf course is to provide a place where the game of golf may be played with the greatest of skill that the individual is able to acquire. The broader reason is to provide a place in which health-giving recreation may be enjoyed to the fullest extent. If this latter reason is the one that is fundamental then the game of golf is merely the means to an end and there are other subordinate factors that contribute to the result desired. If the ultimate, broader reason for the existence of such clubs is fully recognized, then the need of beautiful surroundings for the fulfillment of this purpose will be appreciated.



The tree in the middle foreground hides too much of the front of this building. Without it the picture would be well framed

Good greens and fairways are essential to a good game of golf. Unkempt borders and surroundings in no way contribute to or detract from the requirements of the game itself. But they do materially affect the enjoyment of those playing and add to or detract from its health-giving qualities as they add to or detract from the enjoyment of those playing. This, then, is a reason for considering the surroundings of the course and the possibilities of adding to the enjoyment of the players by attractive and appropriate settings all along the course.

Such additional attractions should not unduly restrict the ground for the play for which the course is designed, nor should they provide

unwarranted or annoying hazards; but if in providing beauty, penalties for poor playing are to a limited extent also provided, it should add zest to the game as well as inspiration to the players.

A commanding location for the club house about which the play features may be naturally grouped, forms the essential backbone for developing satisfactory details. With this part of the scheme well designed there will be left three main sections in which ornamental plantings may be made to add to the appearance of the whole. The first of these areas is the approach side of the club house, including the immediate surroundings of the house and the road borders from the highway and usually the area between the club house and the main highway, although the latter is not included in this area if the club house is so located that there is some of the play area between the club house and the highway. The second area is that around the club house and other buildings not connected with the approach. The third area is the playgrounds themselves, or at least the borders of the various fairways, surroundings of the tennis courts, and other recreational features.



This building would be more attractive with some irregular plantings in place of the severe continuous hedgelike foreground. The trees make a graceful frame

The framing of the club house in foliage as seen from the approaches is of first importance. The foundation of such framing should be trees. If the front presented to the highway or the approach road, wherever the principal view is obtained, is so short that trees placed near each of the corners will cover nearly half of the front, this should be the first planting to be made. If, however, the club house presents a long face to those approaching, then the principal portion of it should be framed in this way and other units of it should

be selected for similar partial hiding, a total of nearly half of it being thus hidden and the balance being left fully open to view. The kinds of trees best adapted to such use are usually those native to the region. Sometimes part of them may be evergreens, but these must be used with care or they will unduly darken the rooms within and thus offset the attractiveness they produce in the picture as seen from the outside.

Next to trees the most important plants for use on the welcoming side of the grounds are shrubs. These need to be at the corners and beside the steps, and enough more so that about half the foundation line is hidden. The plantings should not be continuous. The plantings at the corners should ordinarily be the tallest, although if there is a marked change in the size or character of the club house at any point this may likewise be supplied both with tall-growing shrubs and a mass extending well into the lawn in front of the building. Where intermediate groups are used they should not be alike either in the kinds of plants that are used or in location. These plantings are primarily to bring variety and help the onlooker forget the severity of the architectural lines. The club house is an introduction to a bit of the country and so should in its immediate surroundings begin to suggest the informality that goes with open woodlands and fields.

Another important part of the introduction is the road from the highway to the club house. If the country is flat or there are other unfortunate conditions that have seemed to dictate that it is most appropriate to have the approach straight from the highway to the buildings, then usually the best method of planting the trees is in straight rows paralleling the drive. Often two narrow roads with a liberal turf area between can be provided, and the trees then may be set outside the roads, giving chance of an unbroken view of the entrance to the club house between two banks of foliage. Such an entrance needs to be from 125 to 200 feet wide, depending on the length and the kind of tree that will be used. A long drive of this type should be wider than a short one.

Where the approach road to the club house may be curved, irregular groups of trees so located that at many points the road is well shaded are usually more attractive than those planted at regular distances from the edge of the road and at fairly uniform distances apart. In group plantings many different kinds of trees may be used effectively, but in the straight-line planting only one sort of tree should be used.

In addition to the shrubs already suggested there should be some plantings where the approach road leaves the highway. Care must be used in selecting the plants for such groupings and in placing them, so that traffic hazards will not be created. By using low plants near the road so that a clear view of any approaching traffic may be secured and using taller plants farther back, attractive and safe combinations may be made.

A most important series of plantings must be arranged near the buildings so that conspicuous views of the service portions of the buildings will not be obtained. This will usually require some heavy mass plantings, preferably of evergreens. Another place that always needs screening but which seldom gets the attention it should have, is the parking area. This most necessary adjunct of a country club or golf club that is worthy of the name, all too frequently just happens instead of being carefully designed to be reasonably con-

venient and "hideable." There should be no general view of it either from the front door of the club house or from the highway. Possibly it would have been better to have said "entrance door" in this case, as the front door as a rule faces the grounds and is on the opposite side of the house from the one that is used when approaching. The general relationship of the house and its facings should be that so often found in old colonial homes built on the banks of our larger rivers—the entrance facing one way, the front the other.

The attractiveness of plantings may often be increased by adding some of the more sturdy and self-reliant of the herbaceous perennials to add a touch of color when the shrubs are out of flower. By sturdy and self-reliant is meant those that will thrive with little special attention. No plants will thrive without some attention from time to time, but many kinds will give satisfactory results with far less care than others. The extra care demanded by the less sturdy kinds is not warranted in the general plantings in connection with the setting of a club house. If it is desired to have plants requiring special care, they should be placed where they can be given the extra care with the least difficulty. Special gardens placed where they may be enjoyed from the front of the house are usually the most appropriate places for such plantings. Some of the perennials that can often be used to supplement the flowers of shrubs are the day lilies, August lilies, golden glow, named varieties of our wild asters, and rose mallows. Peonies and iris are good sturdy plants but come at a season when there is an abundance of bloom on the shrubs that are usually planted.

To better visualize the effect that may be produced by groups of shrubbery at important points about the building, it is often desirable to make trial plantings of castor beans for a season. These plants make a quick growth in warm weather when there is plenty of fertility and moisture in the soil. The expense of making such a demonstration is slight. The seed is cheap. The thorough preparation of the soil in the small areas needed for planting would not be great and would serve largely as a preparation for the permanent plantings that would undoubtedly follow a visual presentation of the effects that can be produced. Castor bean varieties vary in height from 4 or 5 feet to 20 feet or more, while the color of the foliage varies from a bright green to bronze and almost red. By selecting kinds of appropriate height and of different colors of foliage real pictures may be formed. This castor-bean demonstration will probably not be satisfactory in places where there are cool nights all summer, as these plants thrive best in warm weather. It would probably be disappointing in most of Maine, New Hampshire, Vermont, Michigan, and Wisconsin, and in the northern part of New York. The seed should be planted so late that it will not come up until after all danger of frost is past. In a rich soil and with plenty of moisture the plants will grow very rapidly. The castor bean will grow wherever corn will grow well. Corn and sorghums may be planted with the beans for contrast and to heighten the effects; but these upright-growing plants would need to be planted in clumps adjacent to or even among the castor beans, and should not be scattered through—only two or three stalks at a place.

Most ornamental and shade trees are usually worth saving when only a few of their limbs are dead, but it is often advisable and less expensive to replace badly diseased trees with perfectly healthy ones.

Beautification of Golf Courses

By A. H. Tomlinson

Ontario Agricultural College, Guelph, Ontario

The golf course should be an object of great beauty and of natural interest. Unfortunately, this is not always the case. In constructing a golf course, often the natural beauty by way of trees, evergreens, pleasing woodlands, open fields, and running streams has to be interfered with and in many instances completely destroyed to bring about a modern golf course. If this should be the case, to relieve the monotony some planting should be done immediately, even before opening the course for play. A golf club, like a residence owner, is under obligation morally to make, or to help make or retain, a beautiful countryside. With attractive grounds and pleasing surroundings the game is bound to be more enjoyable, as the players will receive inspiration if not from the game at least from the environment (it is hoped both). To see a stretch of country called a golf course bare and lacking in tree growth and planting material of any kind is a monotonous and an unattractive picture even if well carpeted with grass. In fact, the sight of such a course to the average observer brings about criticism at once. It must be admitted that it is not always easy to plant trees and otherwise improve the landscape. There is a great deal of expense and labor involved—but the investment is worth while.



Crazy paving and carpet bedding make an attractive entrance approach to a club house

In the first place, a golf course should have a pleasing entrance and approach to the club house, and if at all possible the approach outside the golf course entrance should also be attractive and pleasing. It is unfortunate to find a beautiful golf course with an un-

sightly and unattractive street or roadside entrance. The approach to the club house should always be full of interest and delight; if possible, the driveway should be planted on both sides, or at least one, with shrubs, possibly evergreens, and a shade tree or so. If there is a boundary, a perennial border may be arranged against such with a suitable background of shrubs and evergreens. The club house setting in most cases is paramount. If the house is of rich architectural design, planting should be subordinate, absolutely; but if somewhat ordinary in appearance and style, planting should be done to relieve the bareness of the structure and accentuate such features as main doorways, and, if such exist, pleasing stone work or even frame work.



Ornamental shrubs do much to break the monotony of massive plain walls and windows. *Euonymus alatus*, shown in this illustration, is an evergreen semi-climber and serves well for this purpose

If the club house is of imposing architecture, evergreens choice in color and form should play a part in the planting scheme. But if architectural features of marked outline are lacking, shrubbery with more ordinary evergreens and possibly perennials and annuals can be set around the walls of the building. Foundations, if built of costly stone and in pleasing design, should not be shut in or hidden. Planting around such a structure should act as a relief and should feature pleasing entrances, windows, corners, and the like.

In the northeastern sections, evergreens or conifers like the pyramid cedar (*Thuja pyramidalis*), upright junipers, as *Juniperus communis* variety *suecica*, also *Juniperus virginiana* and variety *glauca*, are among the best. Here and there the oriental cedar (*Thuja ibota*) where it succeeds, should be utilized; it is a beautiful conifer and succeeds well in such sections as the southern parts of Ontario. The dwarf-growing types can be represented by the rounded or globe cedars, Savin's juniper, and particularly *Juniperus pfitzeriana*; while *Juniperus prostrata* and *Juniperus tamariscifolia* are worth consid-

ering. One spreading upright juniper which may be featured is *Juniperus cannarti*. One of the most attractive and hardy dwarf evergreens is Japanese yew (*Taxus cuspidata*).

In shrubs for foundation planting, not only should attractive blossoms, foliage, and habit be considered, but odor. In fact, perfume should always be considered around a club house as well as on home grounds. This means that the mock orange, or *Philadelphus*, should be planted, particularly the variety *virginale*; this is an outstanding shrub with beautiful, large, sweetly scented double blossoms. The common mock orange (*Philadelphus coronarius*) is also most pleasing. In fact, any mock orange may be considered, except tall-growing types like *grandiflora*, unless a tall, bare wall is to be covered. Then lilacs, too, may be planted, but with care. These are usually better out in the open. The *Spiraea* family should have a prominent place, as *Spiraea Van Houttei* and *Spiraea arguta*, while *Spiraea thunbergi* in more favored spots may be considered. The foliage of this *spirea* is very attractive. A comparatively new *spirea* with elder-like blossoms should have a place, known as *Spiraea veitchii*. The low-growing magenta-colored variety Anthony Waterer may be planted against white or grey walls or a background of green. There are numerous shrubs to choose from. Some berried forms should have a place even around the foundation of the building. This brings in the honeysuckle or *Lonicera* group, and should include *Lonicera tatarica* and *Lonicera morrowi* at least.

For climbers in the colder sections, the so-called *Ampelopsis engelmannii* should be given the preference, while in milder parts the more superior self-clinging varieties of *Ampelopsis veitchii* or Japanese ivy come in. At times the two species are planted together. Care must be taken not to allow climbers absolutely to cover beautiful walls and windows. Planting around a building is to bring about a relationship between the structure and the surrounding land and objects.

At times perennials may be set among shrubbery adjoining the building. These would include interesting forms, as peonies, irises, delphiniums, and hollyhocks, not forgetting a few biennials, like *Coreopsis grandiflora*, Canterbury bells, and gaillardias. Clumps of pansies and violets, also here and there sweet-smelling annuals, may be given a chance, particularly mignonette. For evening scent the sweet-smelling tobacco plant *Nicotiana affinis* is a great attribute. The home-like and ever pleasing forget-me-nots, sweet scented or otherwise, should be planted too. Care must be taken not to overcrowd. In fact, as already said, with buildings of marked architectural design very little planting of evergreens and shrubs should be done adjoining the building itself; here the entrances should receive chief attention.

Flower beds are often arranged alongside a driveway and in the lawn space adjoining the building. Flower beds are usually best within an enclosure, especially if the building is of marked design. Here flower beds no doubt have a place, but should be arranged in a suitable effective design. The enclosure may be square, circular, or rectangular. If square or circular the chief feature should be a central object, whether it be statuary or plants, perhaps evergreens; or if a tropical effect in summer is wanted, such plants as palms or dracaenas may be introduced. However, should the space be rectangular or longitudinal, then the opposite boundaries should possess accents of paramount interest and the center should be open. This center may



Some fine specimens of evergreens naturally placed beautify the club grounds at all seasons

be of grass, water, paving stone, or the like. The features at opposite sides may be archways, seats, statuary, or even plant growth of comparatively large dimensions. Running parallel with the long sides may be seats, plant growth, statuary, or flower beds. The first-named system is known as the radial design and the latter as the bilateral. A formal garden should always have a design that is easily understood and have spirit or atmosphere. The so-called Old English type of sunken wall garden would be first class if in the right setting. However, with the average club house the lawn space is better open, and planting done around the buildings and at the boundaries, with thoughts of shade and protection, not forgetting seats scattered in suitable places.

The path or walk approaches to the building may be of cement, gravel or paving stone. Stepping stones or crazy paths, except for private entrances, are rather out of the question, because of the usual traffic in and out of the club house. They are tiptop for an old-fashioned garden.

As far as flower beds are concerned, popular annuals, so-called, are the best, and bulbs for the spring usually are worth while, if the club cares to invest in them. On the course itself trees and evergreens play an important part. At the tees there is a chance for such planting. Care must be taken not to plant where the game may be interfered with unnecessarily, except in the case of hazards.

On the golf course no doubt native deciduous trees as well as native conifers play an important part. On moist soils the elm and silver maple may be given a chance, and on drier soils the hard or sugar maple, the tulip (*Liriodendron tulipifera*), the oak, and the coffee tree. Among the evergreens which may be introduced are blue spruce (*Picea pungens*), also Koster's blue spruce, silver fir (*Abies concolor*), hemlock (*Tsuga canadensis*), Douglas fir (*Pseudotsuga douglasi*), and white spruce (*Picea canadensis*), not forgetting the many pines and the arbor vitae. All have a place either in single specimens or in clumps.

Where there is a chance the so-called wild flowers should be encouraged. There are hosts of them. After all, native flowers are par excellence. Even the most appealing have not always been received kindly at home but are valued highly in European gardens.

Wherever possible, in connection with the lawn or enclosed space near the club house, archways may be instituted, even pergolas if there is space for such. These may be covered with the popular climbing and rambler roses, such as American pillar, Paul's scarlet, Dorothy Perkins, Dr. E. M. Mills, and a host of others. Among the best climbers for archways where fall effect is desired would be the common bittersweet (*Celastrus scandens*). When in berry this is a most attractive climber. *Clematis jackmanii* and other varieties are admirable for archway use.

Shrubs in clumps on the grounds, or even on the course, should include, where effect is wanted, berried forms of *Euonymus americanus*, *Euonymus europaeus*, and other varieties of *Euonymus*. This family of plants is delightful in the fall. Shrub roses may be considered for shrubbery borders and may include the free-flowering Hugonis, the Scotch rose *spinosissima*, the many varieties of the Japanese form, especially the new hybrids, and red and pink Grootendorst. So one may go on! This subject is inexhaustible.

It may be wise at times to seek the assistance of a landscape architect to advise and prepare the plans and to superintend the work. Nursery firms can do this work, but more often the greenkeeper has to take hold. In some instances it is worth while to employ the services of a trained gardener to assist on a golf course. Visualization, a knowledge of design, and familiarity with planting material are all necessary. Every golf club is anxious to have a home-like setting with an atmosphere of welcome for its club house as well as an attractive course, not forgetting the value of the course from the playing standpoint. Thought and money spent for the preservation or the creation of landscape and scenic beauty on the golf course are always worth while.

What a Landscape Committee Accomplished

By J. E. MacCloskey
Longue Vue Club, Pittsburgh, Pa.

Until a short time ago, the public parks and cemeteries in the United States were about the only places where landscape work and planting were possible on a large, permanent scale. To be sure, there were some large, beautiful, private estates outside of New York City, Boston, Philadelphia, and other cities, and extensive summer estates in the Berkshires, in the Catskills, and in other summer places; and fortunately some of the *ante bellum* gardens and homes of the South have been preserved. However, in landscape work we could not compare with England with her dukeries and extensive private parks, landscaped and planted centuries ago, having mile-long avenues of oaks or beeches, four abreast, 200 or 300 years old; nor with France with her chateaus and palaces and hunting lodges built by Francis I and Louis XIV, landscaped by famous gardeners who have obtained immortality from their work. As we had few private estates in America, landscape work on a large scale up until about the beginning of the twentieth century had to be content with the public parks and cemeteries.

The grounds of our golf clubs in America furnish a splendid opportunity for the landscape worker to do his work permanently, under favorable conditions, and at a cost divided among many members. The grounds are generally far enough from the city to be comparatively free from its injurious dirt, smoke, and noises, and also far enough from the city so that it can be reasonably expected that an oak, an elm, or beech will be permitted to live until it reaches maturity or a beautiful size and symmetry and will not be chopped down within a few years of its planting to make way for a duplex or apartment house. The landscape artist is also bound to receive much encouragement in his work around the golf house from the wives and daughters of members, many of whom belong to the local garden clubs which are so prevalent all over the United States; and women love this work. I will also admit that some of the golfers themselves—dubs though they be—take as much delight in seeing a beautiful tree or shrub or bed of flowers, or a beautifully planted hillside, as they do in a long, sweet, straight drive or in sinking a long putt. "Keep your eye on the ball" applies only while you are swinging at the ball—not as you are driving into the golf grounds or sitting on the terrace or walking over the fairway between strokes. While, of course, absolutely nothing should be planted or done to interfere with the fairways or putting greens, nevertheless every golf club throughout the land should aim to make its grounds a beauty spot. Trees, shrubs, flowers, and bulbs should be planted in profusion. Every available space not needed for greens, fairways, practice ground, lawn, or vista should be planted. It may take three years or more before the beauty of the work is realized. An oak, beech, or elm may take 20 years before it begins to show its nobility, but the reward in the end is great. If some one could persuade all the golf clubs in America to plant trees, and more trees, and still more trees, his reward would be as great as that of John Evelyn, whose "Sylva" in 1662 and enthusiasm for beautifying estates were responsible for so much of the planting in England that now delights the American tourist.

"He that delights to plant and set
Makes after ages in his debt."

So said George Wither, a contemporary of Evelyn; and I wish every golfer who has ever taken a divot and failed to replace it could be made to "plant and set" a tree on his course.

For the last five years or so the Longue Vue Club near Pittsburgh has had a landscape committee distinct from the green committee. The club has a beautiful setting on the high hills overlooking the Allegheny River, with long vistas up and down the river. The course winds around the hills, and some of the fairways were cut through rather densely wooded areas. The planting in the immediate vicinity of the club house was done by well-known landscape architects. The original planting in the immediate vicinity of the club was done at the time of building; since then the work has been extended by the landscape committee through the solicitation of funds from the members. Once a year a letter is sent out to each member suggesting a contribution to the landscape fund. While the club has not a large membership, over \$2,000 a year has been contributed during the last five years.



Longue Vue club house nearing completion. The terracing has already been finished under the direction of a landscape architect

We found some large 16-inch elms and some 10-inch maples on our grounds and transplanted some of these to the immediate vicinity of the club house. We planted over 100 large Norway maples, from 4 to 6 inches; and many red oaks, pin oaks, and purple beeches. We covered a whole hillside with 1,000 Norway spruces and various pines. On a sloping bank along the main entrance we put in 961 rambler roses, and we have planted literally hundreds of forsythias, spireas, lilacs, and thousands of barberries. Last year we concentrated our efforts on the construction of a herbaceous garden. The landscape architect happily suggested a situation along the driveway that was very conspicuous, and while our perennials, like the iris,

peony, delphinium, and phlox did not make a great show the first year, nevertheless the annuals that were planted produced a great riot of color, and even the golfers, who consider that a golf ground is for nothing but playing the game, were compelled to stop and look at the beauty of our garden.



Longue Vue club house and its setting after the landscape architect had completed his work

Planting for immediate effect is not as necessary in landscaping golf grounds as in a private estate. Nowadays when a man builds a country home he wants it landscaped extensively at once, so that he can immediately enjoy it; he is unwilling to wait 5, 10, or 20 years for the best effect; he wants immediate results. This is not necessarily true in beautifying golf grounds. We can afford to wait a few years for development; and if this plan is adopted and the material is bought in wholesale quantities, the cost is greatly reduced. The 1,000 spruces and pines which we planted two years ago averaged fully 4 feet in height. If purchased from a retail catalogue, they would have cost us at least \$5 apiece, but we bought them for about \$1 apiece, as we purchased such a large quantity and were satisfied to take some that, although not perfect specimens for foundation planting in the city, were thoroughly satisfactory for hillside planting. Norway maples 10 to 12 feet high and 2 inches in diameter can be purchased in large quantities for \$2 apiece, but if bought in small quantities the price would be two or three times this. A retail catalogue in front of me lists pin oaks 8 to 10 feet high at \$4 each; a wholesale catalogue, in hundred lots, \$2.75 each. The retail catalogue quotes such gladioli as Dr. Morton at \$7 a hundred, Mrs. King at \$5 a hundred, and Golden Measure at \$12 a hundred; while the wholesale price list before me gives the prices, respectively, \$2.50 a hundred, \$1.80 a hundred, and \$3 a hundred. The quality of the bulbs is the same. Small Judas trees or redbuds, 2 to 3 feet in height, suitable for naturalizing, can be bought for \$25 a hundred wholesale, and dogwood the same size for \$50 a hundred. Such shrubs as honeysuckle, 3 to 4 feet in height, mock orange, and spirea Van Houttei, can be purchased for \$20 a hundred wholesale; the retail

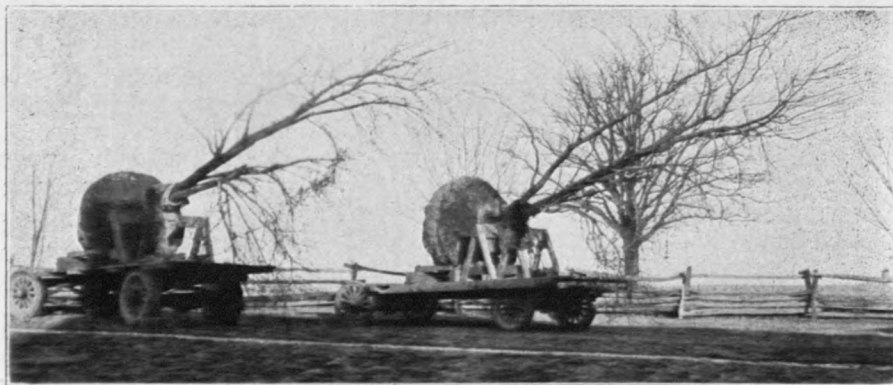
price would be two or three times as much. In a hardy garden, unless one desires to plant for immediate effect, it is not necessary to pay 20 to 25 cents for each plant. A package of seed of delphinium, hollyhock, coreopsis, gaillardia, sweet William, and others, if sown in the same place where the bent grass nursery is located and given the same attention as the nursery grass, will produce in a year's time all the flowers of these varieties that are desired; but one has to plan and wait a year to do it.

Our golf grounds can be made beautiful at little cost if we are satisfied to wait a few years for the growth of the trees and shrubs and flowers, and if some person, belonging to the club, is permitted and encouraged to do the work. They offer a unique opportunity for the preservation and enhancement of our native landscape within close range of our urban life. Beautifully planted golf grounds create not only pride among the members, but inspire other clubs to follow suit. Landscape beauty is contagious to a remarkable degree, and one good example of club pride spreads the charm over a wide area.

Transplanting Trees at Mill Road Farm Golf Course

By C. A. Tregillus

In the completion of any landscape scheme, whether on the golf course or around the club house, it is often desirable to move trees of a fair size. This is not a difficult task; it can be managed by any greenkeeping crew with confidence provided conditions are right.



In moving large trees for transplanting a trailer made from an old truck chassis is an excellent carriage.

The simplest and easiest way to transplant a tree with more than a 3- or 4-inch trunk is with the root system frozen solidly in the ground. With a frozen ball the tree can be handled in a way not permitted when the earth can fall away from the roots. This convenience makes for much quicker work and also provides employment at a slack time of the year.

It is good management to prune the roots and to fertilize a season prior to transplanting. Though this is not always done it is a wise procedure, as it helps to overcome the check that is bound to be felt by any tree that loses a large proportion of its feeding roots. If time will permit it is good practice to prune the roots for two seasons. The

ground around the tree is divided into segments like pieces of a pie, and the first year each alternate section of the circumference is cut to prune back the roots and force new growth closer to the trunk. Fertilizing these sections will help the new growth. The following year the remainder of the ground is handled the same way. It generally happens however that the tree is wanted in a hurry and there is no time to follow this procedure, and it accordingly suffers for want of proper preparation. Fortunately the American elm, which is the most commonly transplanted tree in this part of the country, will stand considerable abuse in this respect; we take numbers out of the woods each winter here in Illinois and have not lost more than 2 or 3 per cent. Maples can be moved successfully in the frozen ball. Oaks of any size are hard to transplant and are rarely attempted. Beech is hazardous.



Over 200 trees were secured from this plantation of young maples and elms 3 years after the trees had been set out as whips. The vacant spaces remaining will be refilled with 6- to 8-foot whips. The screen along the roadway consists of bridal wreath, Philadelphus, honeysuckle, Chinese elm, and wild plum.

When moving trees in the frozen ball it is our practice to trench around the ball early in the winter to permit the frost to penetrate thoroughly. If the trenching is left until late so that the ground is frozen hard it is a good plan to trench gradually, say in 12-inch stages, so that sudden exposure to the weather will not injure the younger roots more than can be helped. Many prefer to leave the trenching until just before the tree is to be moved in order to conserve the moisture should the weather be unusually open. In this case one can save a lot of hard digging by mulching with manure and straw to keep some of the frost out of the ground. The size of the ball is governed by the amount of top growth; for each inch in trunk diameter about 9 to 12 inches of root ball should be secured.

The holes to receive the trees are made in the fall unless the rush of other work interferes. These are made from 2 to 3 feet larger than the ball of the tree to allow for easy handling and to leave room

for a good quantity of rich soil to encourage fresh root development. Since our soil is naturally poor and heavy we remove all the soil taken out of the holes and haul in sufficient rich black dirt to fill around the balls. This dirt is piled beside the holes and covered with straw or manure to keep from freezing. It is important to see that drainage is provided either naturally or artificially. We also make it a custom to explode a charge of dynamite in the bottom of the hole to loosen up ground beneath.



A 24-inch elm tree being moved one-third of a mile on house rollers

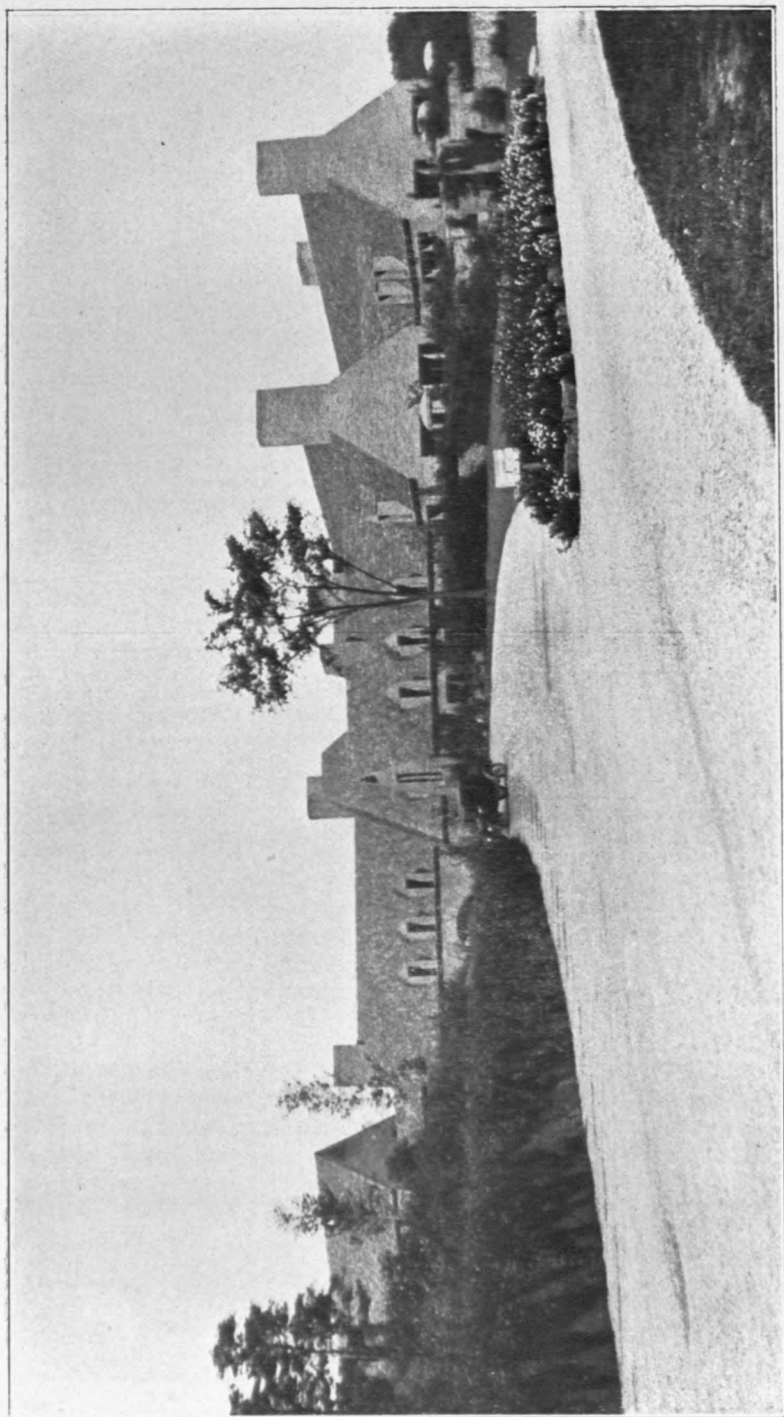
For short-distance hauling a handy mover can be made by slinging a low platform between the front and rear wheels of a farm wagon. In some parts of North America such wagons are in general use. A low-mounted wagon or sled makes it easy to roll the ball out of the hole and onto the mover. A block and tackle are sufficient equipment to pull the top over with trees having up to an 8- or 10-foot ball. It is a good precaution to wrap the trunk or branches where ropes will bear, to prevent chafing. We usually wrap the trunks with grass rope, which not only protects from injury during moving but also from subsequent exposure where a tree has been moved from a sheltered to an exposed position.

Plenty of good rich soil to plant the tree in at its new location helps for a speedy recovery of vigor. When

water is available, we wash the soil in so that no air pockets will be left. Wire guy ropes with turn-buckles are used to hold the tree steady until the roots are thoroughly established. Frequent waterings the first summer will assist in settling the soil firmly around the roots. We allow a small stream from a hose to run for an hour or two at a time and soak the earth to the full depth of the hole. If the leaves commence to turn yellow, it is a sure sign that the tree is drying out and indicates that it needs a thorough soaking. It is also good practice to wash down the main stem a couple of times a day to cool off the bark.

During a dry fall trees may be moved quite easily. Additional precaution must then be taken to keep the root ball intact, and to do this it is wrapped in canvas, which also prevents excessive drying out. Additional protection must be given the trunk to avoid barking.

Large trees with 15-inch trunks require special equipment, and it is well to have such jobs done by firms familiar with the work. The illustration shows a 24-inch tree on house rollers; the combined weight of tree and earth was estimated at between 25 and 30 tons.



Longue Vue club house, showing landscaping of its approach



It is not raining rain for me,
It's raining daffodils;
In every dimpled drop I see
Wild flowers on the hills.

The clouds of gray engulf the day
And overwhelm the town;
It is not raining rain to me,
It's raining roses down.

It is not raining rain to me,
But fields of clover bloom,
Where any buccaneering bee
Can find a bed and room.

A health unto the happy,
A fig for him who frets!
It is not raining rain to me,
It's raining violets.

Robert Loveman

