



Planting Deciduous Trees

REES like humans are living things. And it is an infallible law of nature that all living things must sooner or later die and be returned to the elements from which they came. Although trees have been known to live for centuries and even thousands of years, too often the most desirable trees die before their time and have to be replaced by new ones. Then too, the whims and fancies of individuals many times demand trees where none is located. At other times the vandal's axe has destroyed trees where they should remain. The economic needs of civilization causes still another tremendous drag on our natural resources of standing trees. All of these destructive factors working together are denuding our forests, lawns and recreational grounds much more rapidly than nature can rebuild them.

By intelligent and careful aid it is possible to assist nature to the extent that in a comparatively short time it will be possible to again have the wonderful trees which are both an esthetic and intrinsic boon to man.

Desirable Seasons for Planting

One of the planting seasons is now at hand. In certain sections of the country, especially the southern states and the far western states, fall planting is the best. During the coming months in these two sections, great quantities of water are available for the newly planted trees and at the same time the temperatures are mild enough so that freezing to death is not a serious hindrance. In other sections of the country, namely the eastern and northern states, fall planting is not so good as is spring planting. However, the rush of other work in the springtime usually makes it necessary to do as much fall planting as possible in those sections where it is only second best. Fall planting is not as desirable as spring planting in the eastern and northern states because within a few months the ground is frozen hard so that the roots become inactive and cannot supply to the tops of the trees the water which is constantly evaporating, even in freezing weather. When evaporation has proceeded to dryness, the tree dies and even if it is only partly killed, it continues to be a stunted, unsightly specimen. With these facts in mind it is quite evident that fall planting must be carried out with the greatest care and only such trees should be planted as have the best chances of surviving the rigors of winter.

When the site for planting the tree has been selected, a study should be made of the soil, water and weather conditions existing at that particular spot. Then trees should be selected which are best suited to the place in which they have to grow. For illustration, it would be foolishness to plant a sugar maple in a spot where the soil is heavy, wet and inclined more or less toward being swampy. This is true because the finest specimens of sugar maple grow in well drained moderately light slopes and knolls. In a like manner, it would be a poor practice to plant a pin oak where a sugar maple should grow, because a pin oak grows best in the wet, heavy soil. The American elm is so adaptable that it can grow successfully either in the wet or dry place although it prefers the wet ground. Tulip and walnut trees must be planted in rich, deep soil while locust and some of the oaks can be planted in a relatively poor soil.

Choose Your Varieties Carefully

When the site has been selected and a study made of the conditions, the next problem is to determine the trees to be selected. Too often poor varieties are selected because of their rapid growth. Usually the rapidity of growth is the only desirable feature of these trees. The silver maples, most all the poplars and ailanthus come within this group. Many of the desirable trees grow almost as rapidly and will live twice as long under adverse conditions as will the fast growing ones.

There is considerable difference of opinion as to the best trees to plant. However, a comparatively short list will include most of the desirable trees. Among the oaks

we may list the red, scarlet, white and pin as the best. The Norway, sugar and red maples are the only ones of this group worthy of consideration. Our elm selection should be made from either the American or English variety. Both the American and European lindens are desirable trees. The sweet gum and tupelo can also be included in our list.

In some sections of the country where it is exceedingly difficult to get many trees to grow, it is often times necessary to select the poplars, in spite of the fact that they should not be considered in other sections. The mossy cup oak, the hackberry, the honey locust are better trees, but under the adverse conditions, have an exceedingly difficult time growing into desirable specimens.

Why Nursery Trees Are More Resistant

Obtaining the trees for planting is another problem worthy of some serious thought. Many individuals gather trees from the woods because of their cheapness. One usually finds, however, that when cheapness is the only recommendation given for an article, it is often times best to take the more expensive. This applies equally well with trees. The tree from the nursery is almost invariably best because during its growth, it has been prepared for the shock of transplanting. The chances for the nursery trees growing are much better than are the chances for the one taken from the woods.

Usually the nursery tree is better shaped and makes a more sightly specimen than does the tree from the woods.

The size of the tree to be transplanted depends almost entirely on the amount of money the individual is willing to invest in the trees. One secures the most for the money expended by purchasing trees that are about two inches in diameter. Such trees are small enough to be readily transplanted and at the same time are large enough to make a worth while showing. Larger trees cost more money, have to be transplanted much more carefully and the chances of failure are increased materially with the added size of the trees.

Proper Preparation Before Planting

When the site for the trees has been selected it is necessary to prepare the ground for receiving the tree. The common practice is to slight the preparation and this only leads to future disappointment. For a two inch tree, a hole should be dug at least three feet square and two feet deep. Three feet deep is even better. Fill the bottom of the hole with rich top soil to within a foot of the top. Have enough additional top soil on hand to fill around the tree when it is put in place. The planter is then ready for the tree.

When a tree is dug special care should be exercised to destroy as few roots as possible. Those which are (Continued on page 41)

Start War on Fall Weeds

By JOSEPH VALENTINE
Vice-President, National Association of Greenkeepers
of America, Merion Cricket Club, Philadelphia, Pa.

FALL is fast approaching, and with it comes the crab and goose grass, which is commonly known as "fall grass." In fact in many places it has made its usual appearance. This means, fellow greenkeeper, that we must get busy, and combat this dreaded enemy.

Many greenkeepers are doing all they possibly can to eradicate this weed, but there are also many who are practically doing nothing along this line. It is to this class that I want to emphasize the importance of doing away with this menace to our golf courses.

No doubt many have a method of their own in combating this enemy and I feel sure if their particular method is good, they are certain to succeed. But, it is one thing to have a method, and use it, and still another thing to have a method and not use it. When you have decided on a certain line of attack, give it a thorough trial, and you are bound to obtain some results. But on the other hand if you do not give any method a fair trial, how are you to know whether you are right or wrong?

Ammonium Sulphate Excellent Control

For many years our course was covered with crab and

goose grass, and am very glad to state that we have been fortunate enough to reduce it to a minimum. In the first place do not let this grass go to seed. Check its future growth by the spreading of the seeds. Ammonium sulphate has acted as a wonderful check in overcoming this turf condition. We have been using it very freely, and have applied it very frequently, using about an average of 50 lbs. to the acre. When it is raining our men are instructed to don their rain coats, boots, etc., and go and apply a good application of ammonium sulphate, where same may be needed on the fairways, for this is the best time to apply it. When applied dry it should be mixed with top-dressing or sand. The places which need it the most are the poor spots on the fairways, for you know this grass will thrive extensively in these spots. I would not recommend the use of any spreading apparatus in applying this material. Let this be done by hand, and then the men are certain to apply the material where it is most needed. Since carrying on this method, crab and goose grass have been reduced on

(Continued on page 33)



Noteworthy **Improvements**

Castings of special grade Aluminum, c o m b ining great tensile strength with light weight — perfectly balanced.

Cutting width of 19 inches permits following extreme undulations, and the traction roller prevents scuffing or packing.

Special seven-blade, highspeed cutting reel, mounted on roller bear-

Bevel gear differential between rollers. Turns on its own power. Bevel

Many other successful Jacobsen features incor-porated.

After years of study, Jacobsen engineers have perfected a light, 19-inch mower that produces a velvety effect on creeping bent and other ultra-modern greens. In a long series of demonstrations it has been an outstand-ing success on greens that never before could use anything but hand mowers. It is winning laurels everywhere.

The 24-inch model has also been improved and is now practical for 80 percent of all greens in the country.

Let us demonstrate on your greens. No cost, no obligation. Literature mailed on request.

Jacobsen Mfg. Co.

Dept. A2, Racine, Wisconsin New York Office, 245 W. 55th St.



September Grass Needs

> an abundance of easily absorbed organic nitrate; to feed rootlets, increase stolon budding and give a resistant vitality for Fall and Winter growth. The natural Winter growth.



Undernourishment of Stolons (S, S, S, S, above) shows up in dried, BROWN, RUSTY



It is highly concentrated, 46% nitrogen equivalent to 55.9% ammonia. Completely water soluble-immediately available. White, clean, odorless. Leaves no harmful residue in soil.

Some of Our Distributors

Stumpp & Walter Co., 30-32 Barclay Street, New York—Peter Henderson & Co., 35-37 Cortland Street, New York—Vaughan's Seed Store, 601-609 West Jackson Boulevard, Chicago—J. Oliver Johnson, Inc., Morgan, Huron, Superior Streets, Chicago—J. Charles McCullough Seed Co., 316 Walnut Street, Cincinnati—Jos. Breck & Sons Corp., 85 State Street, Boston—Philadelphia Toro Co., 1528 Belfield Avenue, Philadelphia—Thos. W. Emerson Co., 213-15 State Street, Boston—R. L. Gould & Co., 496 Jackson Street, St. Paul, Minn—Reade Manufacturing Co., Jersey City, N. J.—Lawn Equipment Corp., Larned at Second Streets, Detroit—The Pfarr & Hobart Co., 446 E. Exchange Street, Akron, Ohio—E. L. Winn, Inc., 355 Jersey Avenue, Elizabeth, N. J.—Whitney Goit & Co., 209-211 East 22nd Street, Kansas City.

Synthetic Nitrogen Products Corporation 1150 Broadway New York

Since 1875

TESTED Radways SEEDS

We have on spot new crop CHEWINGS FESCUE N. Z. 99% BENT GRASS SO. GERMAN BLUE GRASS - RED TOP - WHITE CLOVER

Ask for Sample Offers

I. L. RADWANER SEED CO., Inc.

11 WATER STREET

NEW YORK

Phone Bowling Green 3373 Seed Importers and Refiners

The Best Greenkeeper In The World

Cannot maintain perfect turf unless his course is well drained

Think It Over

WENDELL P. MILLER

Golf Course Drainage Engineer Columbus, Ohio 403-5 East Broad Street

Month by Month With the Trees

(Continued from page 18)

injured should be pruned off with a sharp knife so that all roots are perfectly smooth. Half of the top should also be removed, but the part removed should never include the top-most branch or so called leader of the tree. Pick out the side branches which are least essential and which can be removed without materially interfering with the general symmetry of the top. Remove these branches by making a smooth cut flush with the parent stem. In transporting the tree to the place of planting, cover the roots with moist burlap so that it will be protected from drying winds and the sun. As much as five minutes of exposure of the roots to sun and air is sometimes fatal and one cannot be too careful to prevent this damage.

Exclude All Air Around Transplanted Roots

When the tree arrives at the place it is to occupy, place the roots on the top soil and straighten them out so that they lay flat and do not interfere with one another. Cover the roots with the top soil and when they are well covered, thoroughly wet the ground with water. If possible, it is well to make the ground muddy, then by moving the tree up and down, the soil is brought into close contact with all sides of the roots. If for any reason

(Continued on next page)



After 15 years of pioneering golf course irrigation, we are ready to "stand pat" and stake our reputation on this machine with only one moving part, yet covering greater area than any other sprinkler.

Mr. W. P. Bell, the famous California architect, writes:—"CONGRATULATIONS, YOU HAVE NOW SOLVED THE BIG GOLF COURSE PROBLEM."

Mr. William Watson, nationally known architect, writes:—"YOU HAVE NOW GIVEN US THE ANSWER TO THE GREENKEEPER'S PRAYER."

Agent wanted in each golfing district.

BUCKNER MANUFACTURING CO. FRESNO, CALIFORNIA

THE LYMAN CARRIER PRODUCTS

For Better Turf

The Washington strain of creeping bent for vegetative planting. Satisfactory turf guaranteed. Price of stolons reduced.

Nursery, Granger, Indiana.

Lecco, the complete grass food. Takes the place of ammonium sulphate and compost. Many clubs are reporting excellent results from its use.

Factory at Granger, Indiana.

Cocoos creeping bent seed. The last word in fine turf.

Warehouse, Coquille, Oregon.

Poa bulbosa, a winter green grass for the South.

Warehouse, Coquille, Oregon.

LYMAN CARRIER

GRANGER, INDIANA or COQUILLE, OREGON

Changed to FAIRWAY after Exhaustive Comparisons!

"We are very much pleased with the 3,000 feet 1" Fairway recently purchased. On the strength of an actual test with seven or eight other brands of Hose we changed the piping of our entire water system so as to use 1" Fairway. In the test other Hose burst at 70 and 80 pounds water pressure and the pressure was run up to 100 pounds and better on Fairway and it showed no signs of weakening anywhere."



THE REPUBLIC RUBBER CO.

Youngstown, Ohio

Month by Month With the Trees

(Continued from page 41)

parts of the roots are not in contact with the soil, the air at this point will cause them to die.

Firming the soil around the roots with a blunt stick or by tamping it is very essential. This packs the soil tightly and prevents air pockets from being left around the roots. Over the top spread about two inches of loose top soil and the tree is planted.

It is quite essential in the planting operation to see that the tree is not put into the ground more than two inches deeper than it previously grew. Its former depth in the ground can always be determined by a mark on the stem. Planting the tree too high is quite as serious a mistake as is planting it too low.

Attention After Planting

After planting certain care and attention is necessary. Too often a tree is planted and then left to shift for itself. One never does this with crops, shrubs, flowers and the like. Cultivating, watering and fertilizing almost invariably follow. The same practices should be used in caring for newly transplanted trees. Keep the soil well cultivated around them, keep out the weeds and occasionally water them. The second year it is well to fertilize them so that they will have additional food with which to build themselves.

Many times it is necessary to brace the tree so that it will not be blown over in a storm. This can be done in several ways. One of the best is to set three stakes in a triangle about the tree. Guy the tree to each of these stakes by means of a wire which should be enclosed in a rubber hose where it goes around the tree. Another method is to place a strong stake beside the tree. The stake should be six to eight feet long and the tree attached to it in a way similar to that described for the bracing to the three stakes.

The old adage that anything worth doing at all is worth doing well, certainly applies in planting trees.

Editor's Note: Our October issue will contain a special chapter by Mr. Scherer covering the planting of evergreens.