



MAY 1957

# GROW YOUR OWN TREES FROM CUTTINGS

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Use of cuttings or sprouts is a quick, easy and inexpensive way to produce certain trees and shrubs hard to grow from seed.

The plant grown in this manner looks almost exactly like the parent plant. Thus, it is an excellent means of growing trees or shrubs with the characteristics you want.

Cuttings grown from cottonless cottonwoods will be cottonless. The same is true of plants having certain leaf or flower characteristics.

Under ordinary farm and home conditions only certain hardwood trees and shrubs that drop their leaves in the fall are grown in this manner. Under greenhouse conditions, most plants, including evergreens, can be grown from cuttings. The following instructions deal with the hardwood group.

There are several different kinds of cuttings, depending on when they are cut and what part of the tree is used. The following are the most commonly used:

5  
544.3  
N9  
A8  
no. 157

**NDAC Extension Service, Fargo**  
NORTH DAKOTA AGRICULTURAL LEGE

ai. LEGE

5  
544.3  
N9  
A8  
no. 157

## TYPES OF CUTTINGS

**DORMANT WOOD CUTTINGS** - These are best if taken in the fall after the leaves are off the tree. However, they can be taken any time after leaf drop and before new growth begins, providing you can store them properly. Dormant wood cuttings are the method most widely used.

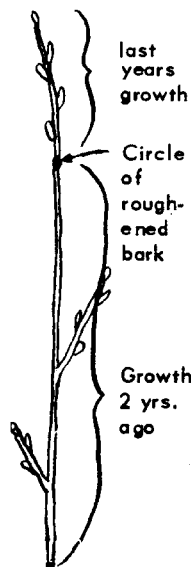
**SOFTWOOD CUTTING** - Take in late spring or early summer. Use only the present year's growth.

**CUTTINGS MADE FROM A ROOT** - Root cuttings are usually made in the fall after growth has stopped for the year.

**SUCKERS** - Not strictly a cutting but are a division of the root which already has developed a shoot.

## DORMANT WOOD CUTTINGS

FOR COTTONWOODS, WILLOWS AND TAMARIX.



Cottonwood branch. Only the past 2 yrs. growth make satisfactory cuttings.

Fig. 1

Make the cutting from the past season's growth, or, at best, not over two years back. You can tell the age of the branch by examining it: At the end of each year's growth you will find a roughened circle on the bark clear around the branch. (See fig. 1) Starting at the tip of the branch and going down it, cut only to the second complete circle of roughened bark.

Individual cuttings need be only 6 to 12 inches long. The top cut should be about 1/4 inch above a well developed bud. Keep the butt ends of the cuttings pointing the same way.

The angle of cut on the cuttings should be almost square across the stem. Only enough slant is made to permit making the cut without bruising or tearing the bark.

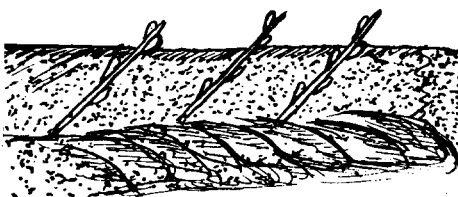
When you finish making the cuttings, tie in handy size bundles of 25 to 100, and bury outdoors in a place where snow will cover the ground all winter. If you cannot, or do not care to, bury the cuttings outdoors, bury in a moist box of sand or moss in the root cellar, or in the cold part of the basement. If stored inside, check the sand from time to time to make sure it doesn't dry out.

In packing the cuttings for storage, lay them on end with the butts up. The butt ends of the cuttings callus best if the bundles are placed butts up. Pack the dirt, sand or moss firmly around the bundle. The position they are stored in isn't as important as to prevent drying or excessive freezing and thawing.

In the spring, when the ground is thawed, dig and plant either in a nursery row for a year or direct in a permanent location.

The planting process is very simple. They can be plowed in or planted individually in holes.

To plow them in, open a furrow 6 to 7 inches deep. Place the cuttings, butt end down, against the sidewall in a slanting position (see fig. 2) deep enough so that  $\frac{3}{4}$  of the cutting will be buried with one or not more than two buds above the ground, when the furrow is filled. Pack the soil firmly around the cutting with the rear tractor wheel.



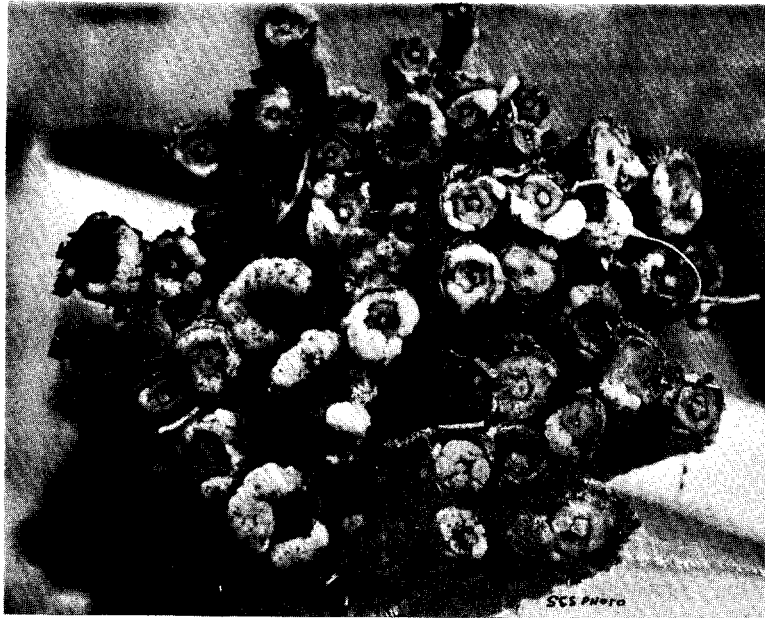
Lay cuttings against the firm wall on a 45 degree angle. Keep 1 or 2 buds above the ground. Fill in trench covering up the bottom  $\frac{3}{4}$ 's of the cutting. Firm the soil.

Fig. 2

To plant in holes, all you need is a shovel. Push the blade in at a 45 degree angle and about 8 inches deep. Make a slit in the dirt by lifting up on the shovel handle. Place the cutting into this slit, butt end down. Now, pull the shovel out and firm the soil around the cutting. (See fig. 3)

Do not force the cutting into the ground. To do so may peel off the bark and ruin the cutting.

Cuttings made in early spring are prepared and planted same as fall cuttings. Better results are obtained if cuttings are made early enough so they can be buried, butt ends up, in moist sand or moss, for a few weeks.



A bundle of Cottonwood cuttings ready for planting. These cuttings were made in late fall. Stored properly over winter, and photographed in early spring. The callused butt ends as pictured above are highly desirable.

## SOFTWOOD CUTTINGS

For lilac, honeysuckle, cotoneaster, high bush cranberry and golden currant, as well as the cottonwoods, willows, and tamarix, use softwood cuttings. The cuttings must be of the current season's growth and made after the leaves appear and are full grown. The size of these cuttings are smaller than the dormant wood cuttings and have only three or four leaves.

Plant the cuttings immediately in wet sand or moist soil in a hotbed. It is best to keep these cuttings in the hotbed for the first year. Plant cuttings same as dormant wood cuttings, only 2 to 3 inches apart in the row. The rows should be as close together as possible but not closer than 6 inches.

Keep the ground and the air in the hotbed moist and do not allow the cuttings to dry out.

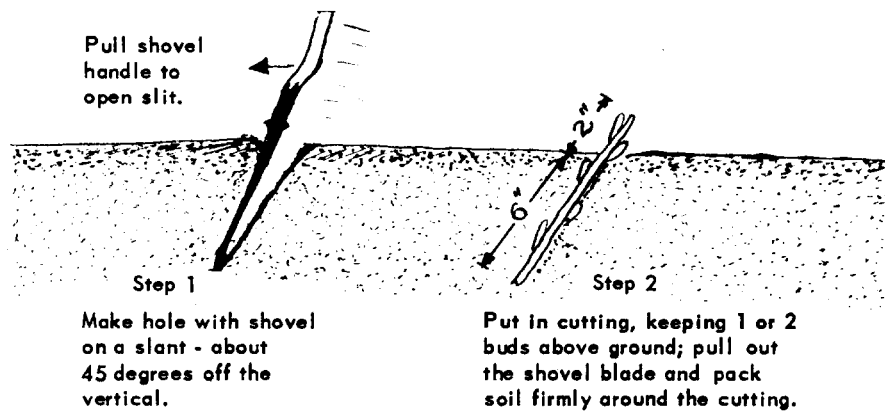


Fig. 3

## ROOT CUTTINGS

Lilac, chokecherry and silver berry can be grown from root cuttings.

Make root cuttings and plant them in the fall. Cuttings can be from 3 inches on up in length and should be 1/4 inch or more in diameter.

It is best to plant these root sections 2 to 3 inches deep in the garden or in some similar spot and keep them there for a year or two before planting in the field. The ground should be moist, protected against excessive freezing and thawing, and have good drainage.

## SUCKERS

Lilac, chokecherry and plum, and sometimes other species when roots have been injured by cultivating equipment, produce suckers.

A sucker is a complete plant in itself, although it is still attached to the root of the parent plant.

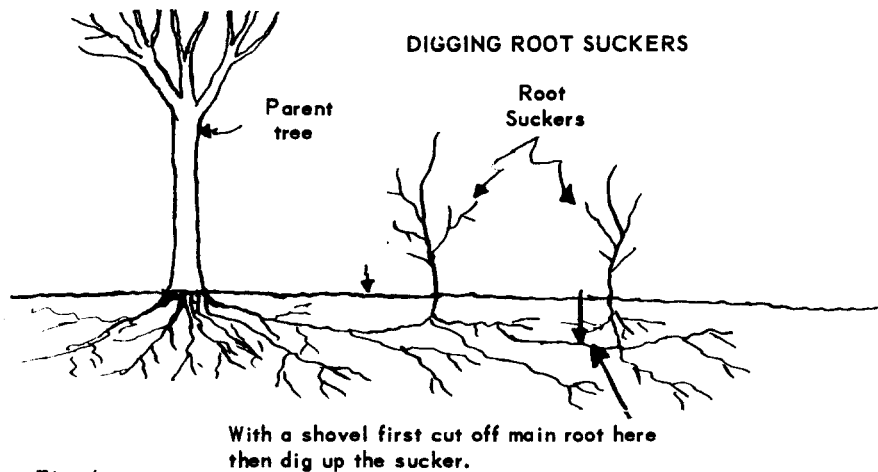


Fig. 4

With lilacs, where you have a tight clump of suckers, you will probably want to dig up the entire clump. Cut the parent roots so all suckers have roots.

Where the suckers are located away from the main stem, the simplest way is to dig up the individual suckers. Using a shovel, dig about 6 to 10 inches from the sucker and between it and the parent plant. (See Fig. 4) In this way you will cut the parent root, prevent excessive root damage and will make the rest of the digging easy.

It is most convenient to dig the suckers early in the spring, before new growth starts.

#### Suggested additional reading:

"Hotbeds and Coldframes" U.S.D.A. Farmers Bulletin 1743.  
 "Propagation of Trees and Shrubs" U.S.D.A. Farmers Bulletin 1567.  
 "Nursery Practice for Trees and Shrubs Suitable for Planting on the Prairie Plains" U.S.D.A. Misc. Pub. 434.

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