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REMOVING TREE STUMPS

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REMOVING TREE STUMPS

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Each year, many Texas home owners are faced with the difficult task of removing tree stumps from their property easily and quickly. Using heavy equipment or explosives which require large, open rural areas generally is not possible. In many instances, burning out stumps may be in violation of local ordinances or cannot be done safely.

There is no quick, easy magical method for reducing stumps to organic matter with chemicals. Several chemical preparations recently have appeared on the market claiming to cause miraculous and quick decomposition of tree stumps. However, none of these contributes markedly to speeding up stump decomposition. If such a chemical were available, it would need to be so strong that it would be extremely dangerous to use.

One recent development is a portable, tractor-mounted, mechanical stump-chipping device. This machine chews up the stump into a pile of chips. Availability of this device, as well as others, likely will be limited to large metropolitan areas. Contact local tree service concerns to determine the machine's availability and the cost for removing stumps.

Preventing Sprouting

To prevent sprouting of live trees, thoroughly paint the top surface of freshly cut stumps within a day of cutting, where the wood and bark joins, with a herbicide such as 2,4,5-T or ammate. If the stumps are to be dug or burned out, about 2 months in the spring or 6 months in the fall or winter should elapse between the

application of herbicides and the stump removal to allow the material time to translocate to the roots. Tree-killing materials are available from most feed and seed dealers, garden supply houses, mail order firms and others. Follow carefully the manufacturer's instructions on using herbicides.

Rotting Out Stumps

The easiest, cheapest and safest method of stump removal is to cut the tree trunk off as near the ground line as practicable, cover it with soil and/or sod and keep the area slightly moist. Grass sprigs or runners may be planted if sod is not used. Keeping the area moist helps wood-destroying organisms such as fungi and insects to speed up decomposition of the stump and also helps to keep the grass alive during dry periods.

Wood decomposition is caused by living organisms which have exacting requirements for oxygen, food, moisture and temperature. Fungi break down the wood tissue in order to use the residual material for food. Changes in the fungi requirements will slow down the decomposition or stop it entirely. For this reason, the area over the stump covered with soil or sod needs to be kept moist.

Before the stump is covered, several large holes, at least 1 inch in diameter, can be bored vertically into the stump, about 6 to 8 inches deep. This helps to hasten slightly the decaying activity, but is not recommended unless a portable power drill and large wood bit can be used for drilling. The decaying process is a slow one, requiring several years for nearly complete stump decomposition. Also, the heartwood of some trees, such as cedar, mulberry, bois d'arc and locust, is naturally durable and requires a longer period to disintegrate.

Digging Out Stumps

The quickest way to remove stumps, but probably the most difficult, is to physically dig

or grub them out of the ground. Small stumps, from trees under 14 inches in diameter, are easy to dig out if they don't have too extensive a root system. Stumps from trees larger than 14 inches in diameter and those with large tap roots are more difficult to remove. However, this method is still one of the best known.

Using this method, dig a trench or ditch around the stump from 1 to 2 feet in width and 1 to 2 feet in depth, depending upon the tree's size, near the point where the roots enter the ground. Cut the roots with an axe, grub hoe or mattock, as close to the stump as possible to reduce its weight. Also, cut the opposite end of the roots at the outer edge of the trench to provide working space. Once the lateral roots have been cut on tap-rooted trees, the stump can be pried slightly to one side of the trench so this root can be cut. Roll, drag, winch or slide the stump out of the hole.

An axe, grub hoe or mattock and a shovel are the only tools required. When sufficient space is available, 4 or 6 feet of a large trunk can be left to help supply leverage to break the stump free of the ground and roots. Tie a tow chain or cable tightly near the stump top and attach the other end to a tractor or truck to pull on the stump and help free it from the hole.

An alternative method

If a power chainsaw is available, an alternative method to this system is to dig a trench around the stump, lower the saw into it and cut the stump off 6 to 8 inches below the ground line. Adequate clearance is needed on one side of the stump to allow the saw operator to start the cut. However, only a narrow trench is necessary for the remainder of the stump to allow adequate clearance for the saw blade as it moves in an arc during the cutting operation. Free the stump of rocks or soil at the line of cut.

Treat the excavation similarly to the system described in the section on rotting stumps out. This method has the added advantage of pro-

viding more soil depth to support grass and reduces the size and weight of the stump to be removed from the hole.

Burning Out Stumps

Burning stumps has long been one system of removing them. However, home owners in cities or towns need to check with local fire ordinances to see if burning is allowed in their area. Do not burn stumps if they are near a building or other flammable material which cannot be moved during the burning process. Stumps burn best after they have dried out for several months.

Take adequate precautions to prevent the fire from escaping to wooded or grass areas.

A small, movable burner

Stumps may be burned out quickly by using a "stove" made of a round metal container similar to a 5-gallon oil or paint can. The stove is made by removing the top and bottom from the can and cutting 4 to 6 one-inch holes in the side near the bottom for draft. Then place the can over or on top of the stump and start a fire in it using wood kindling. After the kindling fire has a good start, add charcoal for a hot fire. For a large stump, add charcoal at frequent intervals and move the burner to unburned portions of the stump. For big stumps, a stove can be made from a 55-gallon oil drum and used in the same manner.

The burning process is hastened by drilling many 1 inch or larger holes 6 to 8 inches deep, vertically into the stump. Do not drill through the entire stump. Use a portable power drill and large wood bit for this purpose. About 2 weeks prior to building the fire, fill the holes with fuel oil or used crankcase oil. Every 2

days, refill the holes to the top with either of these oils so that it will absorb into the wood. If fuel oil is used, be certain the liquid in each hole has absorbed completely into the stump or remove the excess with an absorbent material, prior to starting the fire in the stove.

Other Chemical Stump Removers

Several hundred chemicals, or mixtures of them, have been tested throughout the U. S. to remove stumps. Even sulphuric and nitric acids have been tested, but they are reported to be of no value in stump removal. Only one has promise and this is a mixture of cuperic chloride, sodium dichromate, basic lead acetate and manganese chloride in the powder form of the technical grade. It is marketed under the name "Stumpfyre." Apply it to the stump in a water solution in 1 to 1½ inch vertically drilled holes, on 5 to 6 inch centers, in the stump. Allow this chemical mixture to diffuse through the stump for 2 to 3 months; then burn the stump. County Extension agents can furnish you with the source of supply for this preparation.

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