

## **STORING POWER EQUIPMENT FOR THE WINTER**

Late fall or early winter is a good time to service power equipment such as mowers, tillers and garden tractors. Run the equipment out of gas or treat the existing gas with a stabilizer as untreated gas can deteriorate over time. If using a stabilizer, run the engine long enough for untreated gas in the carburetor bowl to be burned and replaced. This is also a good time to replace the oil (and filter, if present) since the engine is warm. Check and replace the spark plug if necessary. Some gardeners will also apply a light, sprayable oil into the cylinder through the spark plug hole. Check and clean air filters and replace if necessary.

Many mowers and tillers will have a foam prefilter that can become filthy with use. If allowed to become too dirty, engines will run poorly or may not run at all. Sharpen blades, clean tines, tighten screws, replace broken parts and do all the other things needed to keep equipment in good shape. Though such maintenance takes some time and effort, it pays for itself by reducing frustration and lost time due to poorly performing equipment during a hectic spring.

### ***Compost Pile Maintenance***

Compost piles should be turned about once per month even during the winter months. This will insure the composting process continues and that all materials are equally composted. A compost pile is "turned" when uncomposted material is moved from the sides and tops of the pile to the center where it provides "fuel" for the microorganisms that break it down. Water may need to be added if the material you move to the center is dry. Check the moisture content by squeezing a fistful in your hand. It should feel moist but no excess water should drip out.

Compress the material as best you can as excess air can slow the composting process.

### ***Poor Drainage in Garden Areas***

Winter is often a good time to fix areas in the garden where water sits and does not drain properly. Such areas often harm plant roots due to poor oxygen levels in the soil. Consider adding good topsoil so water doesn't sit. Be sure to till or spade the area to mix the new topsoil and the underlying existing soil. Plant roots do not like to cross distinct barriers caused by one type of soil sitting on top of another. Internal drainage can be improved by adding organic matter such as peat moss, rotted hay, cotton burrs, rotted silage or compost. Do this by adding a 2- to 4- inch layer of organic matter to the surface of the soil and incorporating as deeply as possible.

### ***Dormant Seeding of Turfgrass***

The best time to seed cool-season grasses such as tall fescue and Kentucky bluegrass is September because the turf has more time to mature before spring crabgrass germination and the heat stress of summer. Dormant seeding of turfgrass is sometimes used to help fill in bare spots of lawns that weren't overseeded in the fall. Dormant overseeding is done during the winter (December – February) when it is much too cold for germination. As with any seeding program, good seed-soil contact is vital. Several methods can be used. One method is to seed when there has been a light snowfall of up to an inch. This is shallow enough that bare spots can still be seen. Spread seed by hand on areas that need thickening up. As the snow melts, it brings the seed into good contact with the soil where it will germinate in the spring. Another method is dependent on the surface of the soil being moist followed by freezing weather. As moist soil freezes and thaws, small pockets are formed on the wet, bare soil that is perfect for catching and holding seed. As the soil dries, the pockets collapse and cover the seed. A third method involves core aerating, verticutting or hand raking and broadcasting seed immediately after. Of course, the soil must be dry enough and unfrozen for this to be practical. With any of the above methods, seed germinates in the spring as early as possible. There will be limitations on what herbicides can be used for weed control. Tupersan (siduron) can be used as a crabgrass preventer on new seedings even before they have come up. Also dithiopyr, found in Hi-Yield Turf and

Ornamental Weed and Grass Stopper, can be used on tall fescue, Kentucky bluegrass, and perennial ryegrass two weeks after germination. Dithiopyr is longer lasting and more effective than siduron. Other preemergence herbicides require that the turf be well established before application.

## ***Water Landscape Plants***

It is important that perennial plants go into the winter with moist soil. Even with recent rains, some areas of Kansas have been dry this fall with some portions of the state being under drought conditions for much longer. Watering now is important if soils are dry to help alleviate moisture stress and lessen the likelihood of winter damage. Although all perennial plants benefit from moist soils before winter, it is especially important for newly planted trees and shrubs due to limited root systems. Even trees and shrubs planted within the last 2 to 3 years are more sensitive to drought than a well-established plant. Evergreens are also more at risk because moisture is lost from the foliage. A good, deep watering with moisture reaching at least a foot down into the soil is much better than several light sprinklings that just wet the top portions of the soil. A deep watering will help ensure that the majority of roots have access to water. Roots that actually absorb water are killed when the soil temperature reaches 28 degrees F. Those near the surface do not last long in our Kansas winters. We must rely on roots that are deeper, and provide moisture for them to absorb. Regardless of the watering method used, soil should be wet at least 12 inches deep. Use a metal rod, wooden dowel, electric fence post or something similar to check depth. Dry soil is much harder to push through than wet. Trees or shrubs planted within the last year can be watered inexpensively with a 5-gallon bucket. Drill a small hole (1/8") in the side of the bucket near the bottom. Fill the bucket and let the water dribble out slowly next to the tree. Refill the bucket once, and you have applied 10 gallons. Very large transplanted trees and trees that were transplanted two to three years ago will require more water. A perforated soaker hose is a good way to water a newly established bed or foundation plantings. However, soaker hoses are notorious for non-uniform watering. In other words, you often receive too much water from one part of the hose and not enough from another. Hooking both the beginning and the end of the soaker hose to a Y-adapter helps equalize the pressure and therefore provide a more uniform watering. The specific parts you need are shown in the photo above and include the soaker hose, Y-adapter and female to female connector. It is also helpful if the Y-adapter has shut off valves so the volume of flow can be controlled. Too high a flow rate can allow water to run off rather than soak in. On larger trees, the soaker hose can circle the trunk at a distance within the dripline of the tree but at least ½ the distance to the dripline. The dripline of the tree is outermost reach of the branches. On smaller trees, you may circle the tree several times so that only soil which has tree roots will be watered. If using a soaker hose, note the time watering was started. Check frequently to determine the amount of time it takes for water to reach 12 inches. From then on, you can water "by the clock." Use a kitchen oven timer so you remember to move the hose or shut off the faucet. If you are seeing surface runoff, reduce the flow, or build a berm with at least a 4-foot diameter around the base of the tree to allow the water to percolate down through the soil, instead of spreading out.