News Release

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**Mulching Trees and Shrubs**

Mulching trees and shrubs is important to keep them healthy. If you look at the forest floor, there is a thick layer of organic mulch that helps keep the trees in the forest healthy. Mulch reduces soil moisture loss, soil compaction, and it helps maintain a more uniform soil temperature.

Mulches eliminate mowing around trees and shrubs and provides a physical barrier to prevent damage from lawn mowers and weed trimmers. Generally, a 2-3-inch layer of mulch will be adequate to help prevent weed seeds from germinating, but it will not completely stop them. If weeds are present you will need to remove those weeds mechanically or chemically before apply mulch. For individual plants, such as trees, the mulched area should extend at least 3 to 6 feet out from the base of the plant.

The best time to apply mulch is late spring after the soil has warmed up. However, you can apply mulch at anytime during the year. There are a number of organic materials and inorganic materials that can be used. Organic mulches will fade and decompose with time adding small amounts of nutrients and organic matter to the soil.

Some of the best organic materials include pine bark mulch, pine bark nuggets, pine straw, compost, and shredded hardwood. Pine straw will remain in place better than most, but pine bark mulch and pine nuggets will last longer. Other yard wastes such as grass clippings, leaves, and small twigs can be used as mulch. These materials are often better suited on the back side of shrubbery or either composted first and then used as mulch. Organic materials such as wheat straw, shredded newspaper, peanut hulls, wood chips, sawdust, and decomposed leaves can be use as well. Be careful not to mulch too deep with grass clippings, non shredded leaves, and shredded hardwood because they can make a thick mat that makes water penetration nearly impossible.

Inorganic mulch materials such as geotextiles and landscape fabrics are available for use as mulch. These materials will allow water penetration while suppressing weed growth as well. When these materials are used they are often put down prior to planting or right after planting. Then a layer of inorganic mulch is applied over the top. Keep in mind that as organic mulch breaks down this creates a soil layer for weeds to grow.

Inorganic materials such as rocks, pebbles, lava rock, and brick chips have also become very popular. They may seem like a good choice and maintenance free, but make sure they fit the overall landscape design. Planting into these materials can be extremely difficult and leaf removal can become challenging. Black plastic is another widely used inorganic mulch as a soil cover. While plastic will help control weeds, it does not allow water, nutrients, and air to reach the soil profile. Plants can often develop a shallow root system which can be detrimental to the plants during times of drought or stress.

When mulch is used plan on attracting insects and some fungi. This is normal due to the breaking down process of the organic material. Rodents can also become as issue such as voles or mice. Make sure you do not over mulch and create an environment that is more conducive for the insects and rodents to thrive. The benefits of mulches far outweigh the challenges they may bring when applied correctly and accomplish the goals of the landscape design.

For more information about gardening and using mulch in the landscape, contact your local Franklin County Cooperative Extension Office at 919-496-3344. You can also visit the website at franklin.ces.ncsu.edu.

