### Mushrooms

This is Gardening with Chuck on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. At least once every growing season we have a rainy spell. This year we've been blessed twice, once early in the growing season and now again more recently. When this happens we can almost be guaranteed of one thing - mushrooms. Mushrooms are the fruit of a decay fungus organism. They can be found growing on trees, but they are more frequently associated with lawns and grasslands. Some of the fungal organisms are growing on old dead tree roots, others are just growing on decaying roots of grass plants - as we frequently see with fairy rings. When we have wet and especially warm conditions, these fungal organisms will quickly send up their fruits - which we call mushrooms or toadstools. As these fruits mature, they release spores from structures that are called gills that are usually located under the cap of the mushroom. The gills are the line like things that you see under the cap if you kick it over. The spores are the mushroom seeds that will float in the wind, sometimes on the water. Most of the spores dry up and die, but a few will land where there is suitable moisture and organic matter where they will start a new fungal colony. Some of the mushrooms we are seeing right now are beautiful and quite showy, others are very low key and nondescript. Some are quite tasty, others deadly poisonous. Don't ask me to tell you which is which. If they are in your lawn and annoying you, sorry, but there's no way to stop them other then to pluck them up or kick them over when they show up. The best thing to do is simply appreciate them and enjoy them. This has been Gardening with Chuck on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

# Cicada Killers

This is Gardening with Chuck on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. I'm surprised I haven't had any calls yet, but they are showing up out there. They are the huge giant looking wasps known as cicada killers. This wasp is over one inch long, has a black and yellow striped abdomen and reddish brown wings and legs. Females find cicadas, sting and paralyze them, then haul them up a pole or tree to get enough height to glide back to their nest tunnel as the cicada is too big for it to fly off the ground with. Once the female is back to the nest tunnel it drags the cicada underground and lays an egg on it. The egg will hatch out and feed on the paralyzed cicada (what a way to go - this is like a bad science fiction horror movie) and then emerge as an adult next year to start the process all over again. The females do have stingers that they use offensively to nab the cicadas, not defensively like a yellow jacket. They will sting you if you pick them up, so don't do that. But the females are usually quite busy hunting for cicadas. The males, on the other hand, are rather annoying worthless shirkers. They will fly around the area where females have nests hoping to find an unmated female. They will chase each other and anything else that comes into their area. Males have no stingers, though, so all they can do is try to bluff you into leaving. Get out a tennis racket and take practice swings at these guys. Ultimately, they really aren't a problem. The females will make little piles of finely ground dirt as they excavate their nest tunnels but otherwise, they are best ignored as they'll soon be done nesting for yet another year! This has been Gardening with Chuck on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

## Ornamental Pear issues

This is Gardening with Chuck on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. I've noticed a lot of ornamental pears looking just a little bit rough in recent weeks. Some have a few leaf spots, others have a LOT of leaf spots, including rust spots. Some trees are losing a lot of leaves and some are showing evidence of fire blight still from this spring. The thing you need to keep in mind before we go any further is that there really isn't much you can do this late in the season. So don't go spraying anything on your trees and especially don't PAY anyone to spray anything on your pear trees because the leaves look bad. There are several diseases that will get in the leaves of ornamental pears and fruiting pears as well. Keep in mind that there are several different ornamental pear cultivars and they will react differently to the various diseases. Most all of these diseases infected the leaves back in April or May when we were having all that rainy weather and the leaves were first emerging. The diseases were in an active infection mode at that time and the leaves, being young, were very susceptible. Pears are generally more resistant than other trees to many leaf diseases but under the right conditions, and we had them, they can get loaded up! If you have reddish brown spots with large yellow halos around them, you probably have rust. The heavily infected trees are starting to drop leaves right now. Other leaf diseases may be present but I haven't seen those leaves falling off. It's late enough in the season that leaf loss is not going to seriously impact the health of the tree or put it at risk. Should you do something next spring? I honestly wouldn't. This has been Gardening with Chuck on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

### Be careful with stump killers

This is Gardening with Chuck on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. I recently had the unfortunate duty of examining some trees that appeared to be dying. The leaves were turning black and many that weren't turning black were showing distortion of the leaf petiole. As it turned out the homeowners had treated some small trees right around the afflicted trees with a stump killer containing the active ingredient picloram. Picloram isn't found in very many herbicides and the common trade name is Tordon. In this case, the product they used is one designed specifically for treating cut stumps to kill the roots and prevent resprouting. Tordon RTU, meaning ready to use, is very effective. There are many other stump killers avialable including products containing glyphosate and triclopyr. Picloram is different than the rest of these because picloram is very soluble in water and can move through the soil with water. What happened at this residence was that the picloram, while killing the stumps it was applied to, apparently washed off the stump, or over application washed into the soil. As the picloram moved with the soil water it moved into the root zone of the desirable trees and was taken up in the roots. One tree was dead and a second one appeared to be close behind. If you are working in home landscapes around desirable trees, DO NOT use a stump killer containing picloram. I've seen this happen too many times. In these situations use a stump or brush killer containing triclopyr or glyphosate. They will not readily move in the soil water and are very unlikely to be taken up by the roots of a desired plant. This has been Gardening with Chuck on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

### Managing rainfall with vegetation

This is Gardening with Chuck on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. I take great pleasure on seeing how people react to water, particularly rainfall, especially excessive or hard rainfall and the runoff that usually accompanies that. Around here many people want that rainfall runoff to leave the area as soon as possible. We expect that the water will run downhill and end up in a river, sooner rather than later. In low lying areas near our coasts, think Florida here, water doesn't have as many places to run because they don't have the elevation changes that we have. Water tends to just pond up and get deeper but then disappears fairly quickly in part due to much sandier soils than we have. The challenge that we all have is that first of all water is a valuable resource and secondly, if we get it moving out of areas too fast we can have problems with flooding. Excessive building developments in certain areas suddenly create urban flooding issues because of all the impervious surfaces that have been added. Think roofs of buildings, driveways, sidewalks and streets. These are all surfaces that won't absorb water but send it downstream very quickly. Studies have been done on tracts of land showing peak runoff before and after housing developments. Peak water flow following a rainstorm quadrupled following a rainfall event. And the peak runoff occurred faster. If you have water issues on your property or property you manage, don't just think that getting it off the property ASAP is the best answer. There are ways to deal with that and Extension has some resources to help with it - give me a call! This has been Gardening with Chuck on the Talk of JC, 1420 KJCK, I'm Chuck Otte.