Why plants don't survive overwinter in pots

This is Gardening with Chuck. I'm Chuck Otte, Geary County Extension Agent. I regularly have home gardeners ask me about planting some plant in a pot outside. This can include things like fruit trees, blueberry bushes, strawberries, even garlic. In some cases, like blueberries, they know that the soil needs to be amended with lots of organic matter and made quite acid and they correctly know that it will be easier to do this on a small scale than on a large scale. In virtually all cases, the plants going into these pots are plants that have plenty of winter hardiness and survive in the ground just fine. But when placed in these pots they often struggle to survive the winter and often don't. It all comes down to cold, cold tolerance and physics, or at least thermodynamics. When plants are planted in the ground the soil has a tremendous tempering effect especially if the soil has normal soil moisture. Under normal winter weather conditions and soil conditions, the ground will freeze and that frozen ground actually provides insulation. The soil temperature may only be in the upper 20s even though air temperature is in single digits. But when you have a pot stored in the open, the cold can come in from all sides resulting in soil temperatures within the pot that are much colder, in fact cold enough to damage the roots and crowns of plants. We saw this a little bit last year when the soil was so dry that the extreme cold penetrated much deeper than usual and plants had more winter injury than we would expect. If you try to overwinter these kinds of plants in pots, consider mulching them down with hay or moving them inside a garage. This has been Gardening with Chuck and I'm Chuck Otte.

Moth Flies and other UFOs in the house

This is Gardening with Chuck. I'm Chuck Otte, Geary County Extension Agent. My home has been invaded! About ten days ago we started noticing small flies with very rounded wings. If you got close enough you could see that they had fuzzy antenna. As of the weekend I was still fighting them but the numbers are dwindling. These little rascals are a seasonal past known as Moth Flies and often collectively go into a larger group of small flies that we call drain flies and fungus gnats. While these small flies, and they are true flies, can feed and reproduce in decaying organic matter, including in potted plants recently brought in or over ripe fruit, they can also reproduce in the gelatinous slimy junk that builds up in our sink drains. If you are really curious and want to know if a drain is infested, get a jar, take the lid off and place it upside down over the drain. Check it every few hours and if you find little flies in it, the drain needs to be treated! The problem that many homeowners run in to is that they use a drain cleaner to clean the drain but the drain cleaner is designed to clean out clogs in the sink trap and what you need to take care of is above that. Now, don't go dumping pesticides into the sink as that won't help either and is illegal. If you can, get a stiff brush and clean out the gunk OR get a pot of boiling water and dump it down the drain. As long as it takes at least 5 seconds for the water to go down, enough heat will be built up that the larvae of the fly will be killed. I like to use a brush to clean AND a hot water treatment. As for the adult flies that are still buzzing around the house, these aren't strong fliers and a swatter works well! This has been Gardening with Chuck and I'm Chuck Otte.

Winterizing Roses

This is Gardening with Chuck. I'm Chuck Otte, Geary County Extension Agent. I love roses. I don't have nearly as many hybrid tea roses as I once did, probably because I have Charles Darwin roses - you know, survival of the fittest. Most shrub roses have pretty good winter hardiness and a bit of benign neglect often isn't going to be a problem. But if you have hybrid tea roses and you want them to be more than an annual, or a short lived perennial, then you need to winterize them. Hybrid tea roses are usually grafted onto root stocks. If the top dies back to the graft, the rose will send up new shoots in the spring that will grow very well, but never bloom. So to get these hybrid teas reliably through winter, we need to start now with preparations. You don't want to start too early because you want to get the rose bush cold and going into dormancy and then you'll keep them as cool as possible so they don't break dormancy too soon. First you need to mound soil 8 to 10 inches high around each plant. Bring this soil in from somewhere else. If you try to scrape up that much soil from right around the plant you remove protection for important roots that are quite shallow which could cause damage. Maintain a pile of soil that you bring in for this purpose and then take it back out to the pile in the spring. You want to get this soil mounding done now. Then a few weeks later add about a four inch layer of straw, leaves or hay for further protection. You may want to place a little more soil over the top of this to hold it in place. Tie long canes together to keep them from whipping around or prune back to about 36 inches in height for the winter. This has been Gardening with Chuck and I'm Chuck Otte.

High pH Soils

This is Gardening with Chuck. I'm Chuck Otte, Geary County Extension Agent. We live in an area where soils can change in a very short distance. We can go from sand to clay from the front yard to the back and even worse than that, we can jump from acid soils to alkaline soils in not much more distance than that. As you go east in the country, honestly just to the east side of the state soils are pretty consistently acidic. As you go west in Kansas you get soils that are pretty consistently alkaline. But right here, we've got it all! Most gardens plants, while growing across a wide range of soil pH, prefer a slightly acid soil, something around 6.5. Many of our soils routinely run 7.5 to 8.0 and sometimes even higher. High pH soil, alkaline soils, are much harder to deal with than acid soils. High pH soils can sometimes be calcareous meaning we have to first get that free calcium carbonate neutralized and then we can start lowering the pH, We can test for that and find out where we stand. To lower soil pH we need to use sulfur. Sulfur reacts with the soil moisture and forms week sulfuric acid which lowers the pH. Granulated or ground sulfur is smaller and works faster. Soil sulfur often has flakes or small chunks and can take longer to break down and interact. Soil acidification takes time based on temperature, soil moisture and size of the sulfur particles. It can often take 2 years to start to see an impact of sulfur applications on soil pH. We sometimes also have to do it in stages as we don't want to apply more than about 3 pounds of sulfur per 100 square feet at one time. You can lower pH, but it takes time and a plan, so start with a soil test! This has been Gardening with Chuck and I'm Chuck Otte.

Plants losing leaves when brought inside?

This is Gardening with Chuck. I'm Chuck Otte, Geary County Extension Agent. Many gardeners have tropical foliage plants that they take outside in the spring and bring back inside in the fall to overwinter in the house. One thing that many gardeners routinely notice is that when they bring these plants back inside in the fall, it isn't uncommon for the plants to lose leaves, sometimes a lot of leaves. The reason for this comes down to solar energy or light. Even in a bright window in your home, the amount of sunlight coming through the window is much less than the sunlight on the outside of the window. Many tropical plant species have the ability to produce leaves that are structurally different based on if they are in bright sunlight or diffuse shaded light. In essence, the same plant can have sun leaves and shade leaves. If a plant has been brought in from a full sun location to a far less sunny interior location, the sun leaves simply aren't getting enough sunlight to carry on photosynthesis. The plant has to drop them and put out new leaves that are able to carry on photosynthesis with less sunlight. Some plants, like ficus, are extremely sensitive to these changes, others are far less sensitive. There are things that you can do to acclimate a plant. Move the plant in late summer from full sun to a shaded area. Do this a month or two before you are going to bring it in. Then when you bring it in put if in the sunniest spot you've got for another 4 to 8 weeks and then to it's final winter spot. When next spring comes, do this in reverse so the plant can acclimate to brighter conditions. Lastly, don't stress the plant through heavy fertilization either. This has been Gardening with Chuck and I'm Chuck Otte.