Somervell County Master Gardeners

THE GREEN PIECE

TEXAS A&M AGRILIFE EXTENSION

November 2013

November Gardening Tips

By Linda Heideman, Somervell County Master Gardener

Early November is a busy time for gardening in our north Texas area. One of the most important chores is preparing perennials for winter.

While you are preparing your perennial beds for winter you should be thinking about any changes you may have in mind for next year. Draw and write out your ideas on paper and make any changes you can now, while you are doing fall clean-up and winter preparation. Clean-up includes not only the removal of debris, but also storing decorative objects and signs away from the harsh winter elements.

Remove plants that have gone to seed. If you decide to cut back plants that have stopped blooming and the tops have died back, leave 8 to 10 inches above the ground. Woody plants should not be pruned or cut back at all now. Do a thorough weeding around your perennials, removing any plants that are not doing well or are no longer attractive.

This is an excellent time to "divide" your spring-flowering perennials. This means digging them up, dividing the roots, and replanting the newer parts with a handful of bone meal and compost.When dividing the roots, it is sometimes helpful to have a bucket of water at hand to rinse the soil off the freshly-dug roots to see a good spot to cut the roots. For the sake of precision, cutting is preferred to just breaking the old from the new roots. As you divide, pick the best parts to replant where you originally had them, and save the left-overs for other places in your garden or pot them up to give away to your gardening friends.Protect your perennials with a fresh, deep layer of mulch, and let the leaves fall where they may and stay there to provide an extra layer of protection and nutrients. Some favorite perennials include:Coreopsis, Bearded Iris, Bouncing Bet, Daylily, Cannas, Indian Blanket, Louisiana Iris, and Sweet Violet.Remember, late-blooming perennials should not be divided until spring.

In late November you can still plant and divide perennials, but you'd better hurry! It is also time to plant some of your spring bulbs including daffodils, narcissus, jonquils and grape hyacinths directly into soil as you buy them. Remember some bulbs need to be chilled before planting: tulips and Dutch hyacinths should be refrigerated at 45 degrees until mid-December.

The average date of the first killing frost is November 22nd. All your colorful, warm-weather flowers will turn brown and you'll need some cheerful blooms for the holidays and through the winter. How about some pansies, snapdragons, pinks, flowering cabbage, and flowering kale? Insects and caterpillars may be hiding in wait for those pretty little pansies and the tasty cabbage and kale leaves. Sprays containing Bt will control caterpillars best when they are young, and insecticidal soap sprays will control aphids.
Betcha thought November was a quiet month in the garden! Trees and shrubs should also be planted this month and there's plenty to do in the vegetable garden! For more details, check out www.TexasGardener.com , www.centraltexasgardening.net, or www.aggiehorticulture.com. A visit with your county extension agent or a Master Gardener will yield a wealth of information as well.
Do everything *before* you put up the Christmas lights. You'll be glad you did!

My Favorite Plant – Prickly Pear Cactus (Opuntia)

By Sheryl Kleinschmidt, Somervell County Master Gardener

It is this writer's opinion that all plants were put on earth for a reason, if only to teach us a lesson. I think that the prickly pear cactus falls into this category to some degree. In the 1930's, the Australians learned a valuable lesson regarding the cultivation of this cacti in a non-native environment. The cacti took over and became a national hazard until a natural enemy to the cactus was discovered and released.

In Central America, Mexico, and the Southwestern United States, where the prickly pear cactus grows naturally, indigenous populations have learned to utilize it efficiently. Over centuries, the prickly pear cactus became a good source of nutrition (both the pads and the pears), was used medicinally, became food for livestock, dyed cloth, and was grown in thickets as fencing to outline property and keep out intruders.

The prickly pear cactus is extremely versatile and is now found worldwide because it tolerates a wide range of temperatures, moisture-levels, and altitudes. In good conditions, the cactus can reach heights of about seven feet. Its fleshy pads have given the most common culinary species, the Indian Fig Opuntia, the common name of Paddle Cactus.

The pads of the cactus are a storage tank for water, produce flowers, and are the factory where photosynthesis takes place. Spines are found on most species, but all prickly pear cacti have glochids—the tiny hairy barbs that stick in your skin and cause extreme irritation.

When used as a vegetable, the pads are considered best when small and tender. After removing the thorns and glochids (hints given later), pads can be cut into strips and sautéed in a pan with olive oil and other vegetables such as onions, mushrooms and peppers. Raw nopal makes a good addition to fresh salads while fried nopal makes a terrific appetizer.

Prickly pear fruit, also called tunas, grow from one flower and range from very light yellow to bright orange and magenta. The pears ripen from September to November and sweeten with age. Once picked, they only keep a week and must be used quickly. The most common uses of the pears are for making wine, juice and jelly.

Harvesting pads and pears must be done with great care to avoid a handful of glochids. Wear heavy gloves and use tongs and a knife to cut both fruit and pads from the main plant. Glochids can be removed in several ways: scrape them off with a blunt knife, burn them off over an open flame, pressure wash, or roll them in clean sand. Chilling them in cold water for a few hours makes some of the glochids release as well.

I have only made prickly pear cactus jelly once. It was definitely a learning experience and I DID get some annoying glochids stuck in my hands as a souvenir! However, the jelly was some

of the most wonderful I have ever made and knowing that it came from a native Texas plant made it all the more special. The tunas are ripe now, so why not try it yourself?

TEXAS PRICKLY PEAR JELLY

Fruit Preparation: Gather ripe tunas (when very dark) with tongs. A small bucket-full should be enough. Remove thorns/glochids. Wearing rubber gloves, cut tunas in half and put in a large pot with just a little water in the bottom. Cover and simmer until soft enough to mash. Simmer, uncovered, another 5-10 minutes. When cool, squeeze through cheesecloth or a jelly bag.

Mix 5 cups of cactus juice, the juice of 2 lemons, 7.5 cups of sugar and a box of Sure Jell. Follow the directions on the Sure Jell box. Yield is 9.5 pints.

VERMICULTURE 101

By Christine Morgan, ND, Somervell County Master Gardener Intern

What is it and why is it important?

Let's start with some definitions. What is vermiculture? It is the raising of earthworms under defined and/or controlled conditions. In this application, it is a cultured organism. The culture of earthworms is known as vermiculture. Vermicomposting is defined as using earthworms and microorganisms to convert organic waste into black, earthy-smelling, nutrient-rich **humus**. Humus is a nutrient-rich, complex, highly stable material formed during the breakdown of organic matter.

There are two different forms of vermicomposting. The first is a compost pile outside consisting of dead plants, leaves, green grass clippings, small twigs and herbivorous animal (cow, horse, goat, sheep, rabbit) manure. Poultry manure can be used sparingly from clean flocks and if it is aged. Green poultry manure can be very strong and for other reasons is not recommended as the primary manure. The best sources are from only plant eating animals. Some people also add kitchen waste from fruit, vegetables, greens, and egg shells. Manure from dogs, cats, pet rodents, and pet birds should NOT be included. Meat, bones, shellfish waste, and dairy products should be excluded also.
The second form is indoor kitchen waste **only** composting. People use this method to recycle kitchen garbage, make a wonderful soil additive and fertilizer, and raise earthworms to sell and for fishing.

Worms need a constant temperature (between 59-77*F) to be happy and healthy. Below freezing will kill them if they are exposed to 32*F temperature or lower. Outdoor worms burrow deeper as it gets hotter in the summer (above 86*F), and move closer to the surface in the Fall and Spring. In the cold of Winter, they again move to warmer quarters whether that is the center of a warm, active compost pile or deeper in the ground. Kitchen waste composters do best in an indoor environment like a basement or cooler room, especially because of the fact that their habitat is constantly being opened and changed…i.e. influx of new waste material every week.

Temperature, moisture, acidity, and ventilation are very important factors to take into consideration if you want worms to work for you. Worms "breathe" through their skin, which must be moist for exchange of air and excretion of waste (castings/worm manure) to occur. Yes, worms can drown in too much moisture/water. They are fairly tolerant of a wide range of acidity. On a 14-point PH scale, 1 being very acid and 14 being extremely alkaline…PH5 to PH9 is suitable. So they like a slightly acid environment, more to the acid side than alkaline. Ventilation is important because they need oxygen to "breathe" and do their "work". They produce carbon dioxide just like we do, and use oxygen in many of their bodily processes. Breaking up soil, digesting waste matter is what they do. Sort of like tiny plows, breaking up and aerating the soil to help plant roots grow and spread.

The next important piece of information is the fact that there are two different general types of earthworms. Who knew? We have "earthworkers" and "composters".

First, let's discuss "earthworkers". These are the worms you mostly find outside in soil, gardens, and under planters, buckets, etc. They are the "soil-dwelling" species. The scientific name for one of the most prolific species is ***Lumbricus terrestris.*** They don't process large amounts of organic material, they don't reproduce well in confinement (captivity), and it makes them nuts if someone digs around and

messes with their burrow system. Their common name is **"nightcrawlers".** This worm is the most studied of the 4,400 species of earthworms currently named. Another trivia fact…none have been found in Australia! They require large amounts of soil or decaying material and like it cool (50*F). Digging burrows and knowing the intricate burrow system is very important to them. They have a territory and don't like moving day. They play an important role in soil fertility. They perform important soil mixing functions as they travel between the surface and several feet below. They take organic materials into deeper layers of the soil, mix it with subsoils that they consume in their burrowing activities, and bring mineral subsoils to the surface when they deposit their casts (worm poop). The burrows aid in soil aeration and in water retention by increasing the rate at which water can penetrate the deeper soil layers. In plant beds, near water faucets, or garden spaces they are free to burrow and work their magic.
The second general category of worms is the "composters". Composters are worms that consume and process massive amounts of organic material. They reproduce quickly in confinement, and tolerate the disturbance caused by adding bedding and burying new waste. They don't really care about burrows…they are more concerned with food, eating, and reproducing. The scientific name for a large species is *Eisenia fetida.* Their common names are **Redworms, Tiger Worms or Red Wigglers.** Their natural habitats are manure piles, compost piles, or decaying leaves in heavy brush or forest type habitats. They tolerate a wide range of temperature, acidity, and moisture conditions. They are tough worms and withstand handling well. They tolerate being shipped through the mail and living in plastic bait containers without dying. Like I said, they are tough. They like to live and work on the surface in upper layers of soil or bedding, perfect for living in bins and adding new layers of organic material on a regular basis. Another composting species**,** *Lumbricus rubellus*, has the potential for doing double duty as a composter and earthworker.

Interesting Worm Facts

Earthworms don't have any teeth, but they have a gizzard like a chicken; grit helps them grind and process organic matter, which is their food. They have no eyes and can't see…but making cartoons of worms with no eyes seems wrong somehow… Worms are hermaphroditic. Worms have both ovaries and testes, so they can decide who they want to be! They make cocoons with the egg in it and fertilization takes place in the cocoon. Usually 2 or more worms hatch from one end of the cocoon. It takes two worms to fertilize an egg in the cocoon.

Worms are very important in farming and gardening. They are hard workers in breaking down decaying matter and making soil more beneficial to plants. We know when we see earthworms in our gardens, that the soil is rich and probably healthy to support plant growth. If you have no worms in your soil, I suggest getting a soil test ASAP from your county agent to find out why. Recycling kitchen waste and composting outside is a "green" action that helps the earth, your garden and your plants. Worms are an important link in the cycle of life. Now you know more about worms than your neighbor!

References:
www.aggie-horticulture.tamu.edu/beneficial
Worms eat by Garbage by Mary Appelhof
www.easttexasgardening.tamu.edu

Community Horticulture Education Series

Monday, November 11, 6:30 pm
Somervell County Citizens Center
209 SW Barnard, Glen Rose
Free and Open to the Public

Christine Morgan, N.D. will be the guest speaker for Somervell County Master Gardener's Community Horticulture Education Session (CHES) on November 11, at 6:30 p.m. As always, the CHES program will be held at the Citizen's Center on Barnard Street and is free to the public.

This month's session is on square foot gardening. Christine is a Certified Square Foot Gardener who will be bringing along a representative board grid, a power point presentation, and some handouts. She is also a holistic clinical nutritionist who is committed to Traditional Eating, growing and preparing healthy foods. Her private practice is based in Glen Rose.