

Graham County Gardening Newsletter

July 2007

Volume 11, No. 7

Birds in Your Yard/Garden

If you would like to add an active and enjoyable sight to your backyard, set up a place to attract and feed birds. After following several steps and with patient waiting, you will begin to attract a wide variety of birds.

How much will this cost? Like all projects, you can spend more or less.

Bird Feeders and Seed. A wide variety will attract the widest variety of birds. The size and type of the feeder (platform for ground feeders, hanging for perching birds, suet feeders for insect eating birds, etc.) and the size of seed are factors. Plants or shrubs that produce berries, seeds, fruit, nuts, sap or nectar provide food as well as nesting materials. Feed stores, garden centers, grocery stores and others sell seed in various size bags.

Hanging Feeders. Poles can be made or purchased for hanging or stationing of feeders. It is best to place high enough to protect from enemies on the ground such as cats and dogs. But place low enough for easy reach in refilling feeder.



Shelter. Nearby trees and shrubs allow birds to protect themselves if an enemy (cat or dog) comes along. Birds will fly to and from feeders to shelter when they are feeding. The trees and shrubs will also supply nesting places and nesting supplies for nests in trees or nesting boxes if provided. It seems that birds particularly like evergreen trees.



Water. Birds will come even if you do not have a water fountain. However, it would be best to supply moving water of some sort. A mister, dripper or circulating pump will enhance the bird bath. The sound of running water is attracting to the birds. Stones or pebbles that emerge above the water provide a footing. Remember it is important for the water to remain fresh and clean.

Additional Comments.

Plan to protect your garden vegetables if they are nearby. For example, place netting over your tomato plants.

Check out internet sites, books and catalog/magazines for birds. A wealth of information is available.

Inside This Issue:

Container Gardening & Unique Patio Plants.....	Page 2	Flower of the Month: Lantana.....	Page 3
Insect of the Month: Grasshopper....	Page 3	Butterfly Note.....	Page 3
Potting Mix & Containers....	Page 4	Heirloom Tomatoes.....	Page 4
July Garden.....	Page 5	Calendar.....	Page 6

Graham County

ARIZONA COOPERATIVE
EXTENSION

THE UNIVERSITY OF ARIZONA COLLEGE OF AGRICULTURE AND LIFE SCIENCES

Container Gardening with Unique Patio Plants—Growing Succulents and Cacti in Containers

Master Gardener, Marilyn Weaver, attended the Desert Horticulture Conference in Tucson and found this session presented by Jane Evans and Gene Joseph from Plants for the Southwest Nursery to be interesting.

If you have a small limited area and feel that you have no room to garden, no time to garden, and dislike the idea of watering, fertilizing, and fussing over a garden, you can still achieve an attractive outdoor space with minimum effort. Even a tiny patio consisting of concrete or brick can have dramatic results with this type of container gardening.

First, disregard most of the information you may have read about this topic, since most of the books are written in England, Germany or the West coast.

All cacti are succulents, but not all succulents are cacti. Succulence is a term describing a plant that can store water for use in time of drought. There are stem succulents (saguaro), leaf succulents (aloes) and root succulents (Arizona night blooming cereus). Growing cacti and succulents is no different than growing any type of plant. They all need light, water, soil, and appropriate temperatures.

To determine how sun tolerant a species is, look at the plant. If it has many spines, especially white, it is shading itself. If it is blue green, gray or silver it reflects light and can take a lot of sun. Dark green-bodied plants need some shade.



Echinocactus polycyphalus
Cactus with many spines



Mexican Fence Post, a green-bodied cactus

Cold temperatures are a limiting factor for plant growth in our area; therefore microclimates are important in plant placement. If you have a porch or patio, the best being a south porch, cold sensitive plants can be pulled under cover while still receiving most of the lower winter sun. Another option is to cover with a frost cloth. High temperatures also have an affect. When temperatures reach around 105 degrees (which can happen quickly in an enclosed brick or concrete patio) the roots on many succulents and cacti, especially aloes, tend to shut down. If over watered at this time, they will virtually steam cook and begin to rot. Another solution is to plant some leafy summer annuals in the same pot that will use up excess water and help cool the roots. Most cacti and succulents are summer growers, whereas aloes, boojums, mesembs and winter growing bulbs are winter growers if placed in a warm microclimate.

Water when the soil is slightly dry, as often as two times a week in summer to as little as one time a

month in winter. Watering is related to amount of light the plant gets, air movement, potting soil, pot size and type, and growth rate of the species.

Soil texture should be even throughout the pot to facilitate water movement, or good drainage. Do not put rocks in the bottom of a pot; this slows water movement out of the pot. A good potting mix for cacti and succulents is 50% pumice, 20% peat moss, 20% mulch (decomposed fir bark), 5% sand and 5% vermiculite. Perlite floats out of the soil to the top of the pot and is not recommended. Top dress the container with shells or decorative rock.

Potted succulents and cacti can be fertilized with any water soluble fertilizer (20/20/20) at half strength, in May and July.

Any type of container can be used, as long as it has drainage holes in the bottom. Clay pots are porous and dry out quickly, and are not overly expensive. Plastic pots are lightweight, inexpensive, sometimes tend to break down quickly in the sun, and do not breathe. Therefore they hold water longer than clay. Stoneware pots are most decorative and expensive, and in most cases do not breath.

Aphids, mealy bugs, scale and agave weevils are the common pests on cacti and succulents. The first step is physical removal (picking them off). Next is to spray the insects off with a small jet of water. Next use a soap spray (2-5 TBS. dish detergent in a gallon of water), soaking the insects a couple of times a week for a couple of weeks. As a last resort there are numerous insecticides that will kill the insects. For recurring problems, move the plant to better light and air movement (continued on page 4)

Flower of the Month



Lantana *Lantana spp.*

Temperature zone: 8-9 USDA zones: 12 Sunset zones

Frost protection: 28 degrees F.

Exposure: Sun

Origin: tropical America, West Africa

Growth habits: depends on cultivar, 1 ft. – 5 ft. tall, spreading, mounding

Water requirements: low

Propagation: cuttings, seeds

Leaf: coarse, dark green, pungent when crushed

Flower: depends on cultivar

Fruit: blue black drupe, can be toxic depending on cultivar

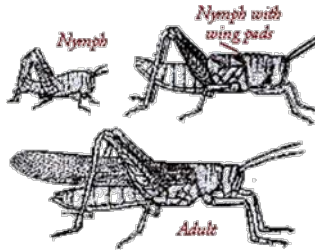
Wildlife value: attracts butterflies, hummingbirds



Butterfly Note

Have you ever seen butterflies flocking around a mud puddle? It's called a "puddle club" where butterflies drink water that contains minerals and other nutrients they need. You can make your own puddle. Fill a plastic or clay saucer with sand or gravel and set it on the ground. Keep it wet with water, stale soda or beer which helps provide salts and nutrients adult butterflies need.

Insect: Grasshopper



Grasshopper Identifying Features, Appearance (Morphology)

Phylum, Anthropoda; Class, Insecta; Order, Orthoptera

Brown with some darker markings

Black herringbone pattern on hind femur

Big hind legs for jumping

2 pairs of wings: forewings narrow and relatively hard; hind wings large, membranous

Antennae not very long, 20- 24 segments

Conspicuous eyes

Cerci (pair of appendages at end of abdomen) unjointed

Adult Males and Females. Males have a single unpaired plate at the end of abdomen. Female has two pairs of valves (triangle shapes) at end of abdomen used to dig in sand when egg laying. Soil is probed for proper physical and chemical properties and proper temperature. When eggs are layed, they are lightly covered over by the female and both male and female leave.

Immatures (different stages). In very young state, the grasshopper has no wings. In later stages, wings are visible as small pads at end of thorax.

Natural History

Food. Many species of grasshoppers are general herbivores feeding on a variety of plants. Some species only like grasses.

They usually have two feeding periods, morning and afternoon in late spring and summer.

Habitat. Widespread in U.S.

Predators. Birds, lizards, mantids, spiders, and rodents eat grasshoppers.

Interesting Behaviors.

Feeding. Although they eat many things, they still have preferences. Mating behavior: See how male courts female. Egg-laying: Female digs hole with abdomen. Some grasshoppers spit a brown bitter liquid as a defensive behavior in response to being handled. Use a piece of white paper and gently wipe the grasshopper's mouth if the spit is not evident. Before molting, grasshoppers do not eat and become less active. During the molt, they swallow air to build up pressure to split the old cuticle.

Grasshoppers are perceptive and can sense you when you are several feet away. If they are on a plant and you try to grab them, they will move around the stem and often drop off the plant. They also can communicate with each other, but there are different communications between species.

Impact on the Ecosystem.

Positive. As herbivores, grasshoppers link plants to the rest of the ecosystem. Frass (droppings) contribute to nutrient turnover by returning nutrients as fertilizer for the plants. They provide food for birds and other arthropods.

Negative. Sometimes some species of grasshopper occur in very large numbers and cause serious crop damage and loss of plants in pastures.

Where to find. Grasshoppers (continued on page 4)

Grasshopper

(continued from page 3)

are around in the spring and summer but are most noticeable in the autumn. Areas with many grasses, small “vacant” lots and gardens are good places to start looking. Look at the area as you walk through. If you can hear the plants moving as you walk, there are most likely grasshoppers around. Look during the middle of the day for best results. At night, use a flashlight to find grasshoppers roosting on the leaves. In the summer and autumn, some grasshoppers fly into porch lights. When night temperatures go above 80 degrees F they will feed at night, too.

Source:

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sected.arizona.edu/ghopperinfo.htm

www.sdvc.uwyo.edu/grasshopper/fieldguide.htm (Field guide to western grasshoppers)



Potting Mix & Containers

If you use potting mix for containers, the mix may float up out of the pot. Peat moss, a main ingredient holds water well once it is wet but it can be hard to get it wet in the first place.

Solution: Place dry potting mix in a bucket, pour water on it, and mix with hands until it is wet. Then place in the pot.

For retention, add Agrisoke which will help to retain and then release the water more slowly. However, even with Agrisoke, it is advisable to water your containers every day in our very hot summer days.

Container Gardening

(continued from page 2)

conditions. Look at your plants closely on a regular basis, not only will you appreciate the plant’s details, but you can observe good plant growth and possible insects. Should agave borers invade, which are specific to agaves, destroy the plant.

Display your plants in groups that have similar care. Large pots will do well on the ground, small ones on benches, tables and shelves. Larger plants can provide shade to smaller ones.

Do not be intimidated by so called “rare and exotic” specimens. Give them a try in your cacti and succulent garden. The beauty of container gardening is the ability to move your pots to find just the right spot for new and unusual acquisitions.

Heirloom Tomatoes

Many of the tomatoes and other vegetables that you buy in the nursery these days are hybrids, produced by crossing specific varieties to create a “custom” plant that has the characteristics desired by the plant breeder. The percentage of the hybrid plants is carefully controlled to achieve uniformly predictable results. Hybrid plants will usually not breed true to type, that is the seeds from hybrid plants will usually not produce plants with the same characteristics as the parents.

Heirloom varieties, on the other hand, are open-pollinated by insects, the wind, or other natural mechanisms, which means that the exact parentage of each plant is not precisely known and their characteristics cannot be precisely predicted. Although there will be more variation between individuals of open-pollinated plants, their

seeds will produce plants that have the same basic characteristics as the parents.

To be considered an *heirloom*, a tomato or other vegetable must not only be open-pollinated, but must also have been developed at some time in the past. The exact meaning of “some time” is a subject of debate. Some people accept 1951 as the latest date for the development of an heirloom plant; others accept 1945; and yet others insist that an heirloom plant must have been developed at least 100 years ago. Some heirlooms were developed so long ago in the past that their origins have disappeared into the mists of time.

Gardeners like to grow heirloom tomatoes and other plants—there are heirloom varieties of ornamentals too—simply because there is a wider choice of plant characteristics to choose from. In the case of tomatoes, the fruits from heirloom varieties vary in size, shape, sweetness, color, and so on. A sure way to generate a lively discussion among heirloom growers is to discuss which variety is the “best”. Gardeners who are seed-savers also like heirlooms because they can grow the same varieties year after year without seasonal trips to the nursery or plant store to buy hybrids.

Source:

By Gary A. Gruenhagen, Master Gardener, from the High on the Desert, Cochise County Master Gardener Newsletter



In Your July Garden!

- Plant winter squash, corn, beans, black-eyed peas, cucumbers and radishes all month.
- Plant sunflowers, summer squash, watermelon and pumpkins (planting now will give you Halloween pumpkins) through the 15th of the month.
- Plant broccoli, Brussel sprouts, cabbage, carrots, cauliflower, and kohlrabi from July 15th on.
- Set out annuals such as cosmos, coreopsis, marigolds, salvia, verbena, vinca rosea and zinnias.
- Treat chlorosis in plants with iron chelate. Chlorosis shows up as yellowing of new growth between the green veins.
- Pepper, cucumber, squash and tomato plants need even soil moisture to prevent blossom end rot. Black or brown leathery patches develop on the blossom end of the fruit. Uneven moisture levels cause a calcium deficiency in the fruits. Keep evenly watered and put mulch around the plants to hold moisture.
- Watch for signs of curly top virus in tomatoes, melons and cucumbers. The leaves of the affected plant curl upwards and the plant will be stunted. Remove and destroy (do not compost) affected plants.
- Pollination often suffers when temperatures are high. Bell peppers, tomatoes and squash are most commonly affected. Flowers dry up and fall off, leaving no developing fruit. Keep plants watered and healthy and fruit production will resume when the temperatures drop.
- Fertilize lawns monthly through the summer.
- Bermuda grass needs to be watered about every 3 days during the heat of the summer. If you notice sizable wilted patches of dull, blue-green grass that does not spring back after being walked on, it is time to water. Give lawns special attention where tree roots compete for moisture.
- Blast off aphids, thrips and mites with a stream of water from your hose or use insecticidal soap.
- Cut back chrysanthemums to about 8" high or pinch back smaller plants on July 1 and again August 1 to encourage bushier plants and more flowers in the fall.
- Feed roses after each bloom cycle.
- Mulch plants with 3 – 4 inches of organic matter for weed control and moisture retention.
- Continue to deadhead spent blossoms to promote more flowers.
- Continue to deep water trees and shrubs through the heat of the summer.
- Make sure apricot trees get enough water to carry them through their fruiting.
- Keep watching for grape leaf skeletonizers.

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If we can be of service in providing objective information in agriculture, natural resources, youth, family, community resources, and related fields, please call us.

Comments or Questions: call 928-428-2611



No workshops in July and August

MASTER GARDENER MEETING, TUESDAY, SEPTEMBER 11
6:00 P.M., BLM CONFERENCE ROOM

**Safford Farmers Market, Firth Park
10th Ave. & Thatcher Blvd.**

June to end of September
Tuesdays: 8:30 to 11:30
Wednesdays: 1:00 to 5:00
Saturdays: 8:30 to 11:00
Or until sold out

**Highland Garden Conference, Apache Gold Casino,
San Carlos by Yavapai & Mohave Master Gardeners**

October 11 & 12

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