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the Cochise County Master Gardener

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Bird of Paradise *Caesalpinia gilliesii*

Barbara Kishbaugh
Staff Writer

When living in Globe, Arizona, I used to hike the hills near our home and crossed a dry creek bed each time I went out. On the outer edges of the sandy wash grew open bushes with a sort of delicate appearance. In spring the bushes developed blossoms with red-orange stamen coming out from the center of the yellow flower. The plant is tough and fast growing to 10 feet in height and even when viewed in the natural multiple plant clusters it still gives an open, airy aspect. Planted as a single specimen draws more attention to the distinctive fern-type leaves and abundant flowers found on each individual plant.

It will be noticed on roadways, although it is now also considered a desert landscaping alternative for homeowners. *Caesalpinia pulcherrima* is the freeway species with the orange-red flowers and thicker leaves. This plant will actually make a desert hedge in a controlled environment.

Since the bird of paradise grows naturally along stream beds which are dry most of the year, it is an indication it prefers being close to a water source and soil which drains well. *Caesalpinia* is an adapted native plant so it will survive drought conditions, however when watered on a maintained schedule, the plant will appear fuller and the blossoms healthier. Bees and hummingbirds will come to visit when those delicately bold blossoms waive in the slightest breeze.

Caesalpinia seed can be collected and placed in containers. Germination rate is high and transplanting usually successful. It is a legume like many desert plants and therefore nitrogen fixing which will be of benefit to other plants in the growing vicinity.

Robert E. Call

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SOLAR GREENHOUSES PART IX

Emilie Vardaman

Now that it's officially spring and beginning to get warm, it's time to think about how to keep your greenhouse cool during the hot summer months. Remember, a solar greenhouse is a giant solar collector, and if it's not shaded in some way, it will keep collecting heat all summer long.

If you've designed it properly, facing true south with lots of south glass and minimal glass on the east and west sides, you're off to a good start. If the roof overhangs the south side, you're even better off because less summer sun will enter the windows. A properly designed greenhouse will be ready to face a hot summer with few overheating problems.

You'll want lots of light in the greenhouse, just no direct sunlight. Once sunshine passes through glass it changes from light energy to heat energy. The plants inside will still need plenty of indirect light.

You can plant shade trees in the yard to the southeast and southwest of the greenhouse. Don't plant evergreens or others that don't shed their leaves in winter or you'll also block winter sun. Plant trees that fill out with lots of leaves but will drop them all and pass lots of light through sparse branches in winter.

You can also plant tall flowers such as sunflowers along the south exterior of the greenhouse. What a perfect way to shade the

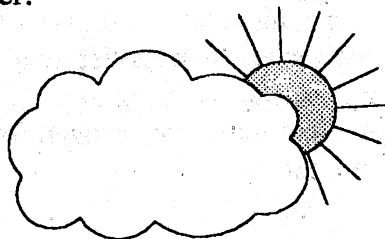
glass! They'll grow about six feet tall and provide plenty of summer shade.

Any fast growing vine would also provide shade. Use a vine that can be pruned back in the fall but grows quickly in the spring. Or, plant your peas and beans along the south side. Just don't plant anything permanent that will grow tall and shade the glass during the winter.

You can also make removable shade screens. It's a bit of work, and you'll need a place to store them during the winter, but they work well, admitting diffuse light that plants love without admitting direct light.

Whatever method you choose, plan ahead. July is not the time to think about shading! You'll have to make shade screens in April and May or plant vines and sunflowers in early spring if you want your greenhouse to perform well in summer.

A final option is to design a greenhouse that converts into a screened porch in summer. Most of the glass will need to be removable (another storage problem) or you'll need to use mainly operable windows. Neither is a good option for winter as all operable and removable windows leak air. If you choose this method, be sure to purchase windows with extremely low infiltration or caulk and seal the panels of glass well in the winter.



APRIL REMINDERS

- Watch out for late frosts
- Stake new trees
- Plant cool season veggies (*Vegetable Varieties for Arizona*)
- Fertilize (*Fertilizing Home Gardens in Arizona*)
- Prepare for pests—put out codling moth traps

The two pamphlets listed in parenthesis are available in the Cooperative Extension Offices in Sierra Vista and Willcox, as well as many other pamphlets that may be helpful to you.

Remember!



Informational pamphlets are available in the Cooperative Extension offices.

Staff: Carolyn Gruenhagen
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HIGHLIGHTS

As promised last month, here are a few highlights from presentations at the High on the Desert Gardening & Landscaping Conference. Those of you who missed this one will definitely want to attend next year—February 16-18!

From David Epple, *Landscaping with Succulents and Cactus*

- “Lighten up” — don’t worry about pronouncing all those Latin plant names, nobody pronounces them the same anyway!
- No supplemental watering is used at his cactus gardens at Arizona Cactus and Succulents, Inc. Bisbee.
- Tons of *nopalitos* (prickly pear pads used in Mexican and Southwestern cooking) are imported into the United States from Mexico each year. Future crop for Arizona?

From Tim Udall, *Tips and Techniques for the Home Orchardist*

- Enlist neighborhood kids to help keep people from stealing your fruit.
- Sure fire cure for gophers—get a Bull or King snake!
- To get the best crop of apples, thin to one apple for every 35 leaves.

Susan Corl, *The Art of Growing and Preserving Local Flowers*

- Sheet composting (planting immediately in layered compost materials) is a wonderfully easy way to start a garden without having to dig in the hard, rocky soil.
- Reseed native wildflowers and dry for beautiful arrangements.

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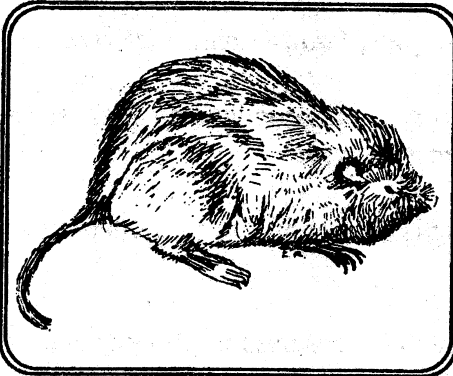
THE AGENT'S CORNER

Robert E. Call
Horticulture Agent

QUESTION: How can I rid my property of gophers? They are making mounds and destroying some trees and bulbs in my garden.

ANSWER: Pocket gophers are burrowing rodents, so named because they have fur-lined, outer pouches on each cheek that can be turned inside out to carry food. Pocket gophers are strict herbivores and any animal material in their diets appears to be accidental. These rodents feed on roots, bulbs, corms or rhizomes they encounter when digging. They can pull vegetation into their tunnels from down below. They will also venture out of their runs a body length or so into the open to feed on above ground plant material. Pocket

gophers burrows are a system of tunnels totaling up to 200 yards with densities of 6 to 8 rodents per acre a high population. The main burrow is generally 2 to 3 inches in diameter, depending on the size of the occupant and is 4 to 18 inches beneath the soil surface depending on the soil type. Lighter textured sandy soils will have deeper burrows than heavier clay soils. The soils ability to withstand cave-ins determines burrow depth, although some parts of the burrow may be 5 to 6 feet deep. Deeper branches off of the main burrow are used for nests and food caches. Enlargements along the main burrow are usually feeding and resting stations. Nests chambers are lined with dry grass and other plant materials. A less apparent requirement of burrow depth is the need for fresh air and exhaled gases to pass through the soil to and from the gopher's tunnel. Therefore, heavy clay soils or those that are continuously wet, diffuse gases poorly and are not suitable for gophers. The fan shaped mound of soil seen on the surface is the excavated soil that is pushed out of the main burrow through a lateral branch. Pocket gophers are usually solitary

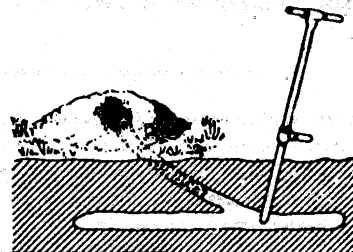


except during the breeding season. Gophers have 1 or 2 litters per year and average 3 to 4 babies per litter, but 1 to 10 may be born. Birth is usually from March through June after 18 or 19 days of gestation. Predators of pocket gophers that pursue them underground are weasels, perhaps spotted skunks, and several snakes including bull and rattlesnakes. Dogs and cats may dig or capture them above ground along with other similar wildlife.

Control: Exclusion cages may be made by using 1/4 to 1/2 inch mesh hardware cloth which are placed in the ground and planted into. Plastic netting placed under newly planted seed beds or bare root plants may slow gophers down. There are no registered chemical repellents other than moth balls which are ineffective. Also noise devices and plants reported to repel pocket gophers have proven to be ineffective. Gopher

traps are effective if a gopher runs into one. They are placed in the burrow and should have a wire or twine tied to the trap and an above ground stake so it can be retrieved when a gopher is caught. Perhaps the best way to rid your garden is to use toxic baits. These are usually grains that have been coated with poison. Currently the anticoagulant chlorophacinone formulated with a 0.005% active ingredient is available. This product is placed on grain and then formed into small bars which are held together with a waxy material. Another poison is zinc phosphide (2% active ingredient) is also available as a grain bait.

The best way to find the burrow is with a pointed steel rod cane that is used by probing the area a foot or two away from a mound.



Right way to use runway probe

Remember that the mound is a short lateral tunnel off of the main burrow where soil is removed from the burrow. When a burrow is found, the rod will go easily through the soil. Dig down to the tunnel, locating the burrow hole on each sides of the hole you dug. Place some bait in each burrow hole and cover the baited burrow hole with a weed or grass so that backfilled soil will not fall on top of the bait. Fill in the hole and then knock down any of the soil mounds within a 10 to 15 foot radius of where you dug a hole. Come back in a week and see if there are new mounds and bait those. Over time you will get the pocket gophers under control.

Source: *Controlling Pocket Gophers in New Mexico*. New Mexico State University Extension Publication 400 L-2, pp. 5.



CUTTINGS 'N' CLIPPINGS

- If you received an Easter lily this year, enjoy it in your home and after it blooms, remove the spent blossoms and plant it in a sunny location in your garden. When the leaves turn brown, cut the plant back. Next spring you will be once again be able to enjoy the beauty of the Easter lily in your garden.
 - Use an old broomstick (minus the broom) or a dowel rod to make a straight furrow for planting seeds. Lay it down on top of prepared soil, push it in about 1/2 inch deep, remove, and plant your seeds.
 - Lay pieces of old jute-backed carpet or newspaper between rows of vegetables to discourage weeds.
 - Try tying your tomato plants to stakes with old panty hose to minimize damage.
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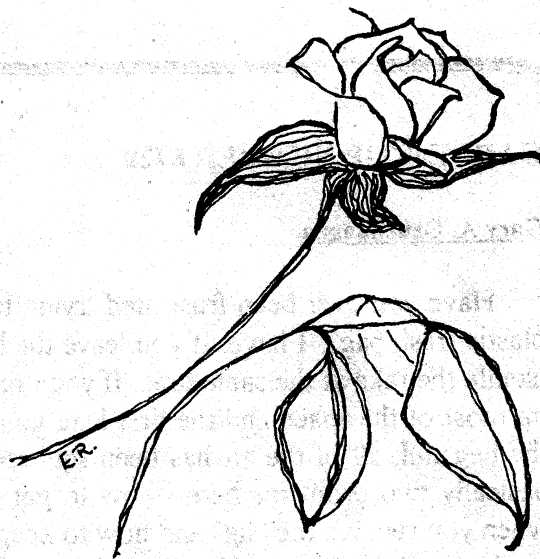
DIVIDING MINIATURE ROSES

Carole Cox

Most miniature roses grow on their own roots instead of being grafted on to different rootstock. So, while it is not often done, it is usually quite easy to increase the number of your plants by division just as you would with chrysanthemums, daylilies, *etc.*

In the spring (it can also be done in the fall), look at the form of your miniature rose. It will most likely have more than one stem emerging from the ground at the base of the plant—often there are several. Sometimes there are even low-growing branches that have lain on the ground and taken root—they root easily from branches and stems. (The latter can be cut off from the main plant, dug from the ground, and replanted separately—be sure the base and roots are planted well underground.)

If you find that your miniature rosebush DOES have more than one basal stem, dig up the rosebush and cut it apart, making certain that each new section of the rosebush will have adequate roots on it. Prune the tops of the newly separated



plants back rather heavily, prune off any broken roots, and replant just as you would a new miniature rosebush. If each section is planted deeply enough so that two or more of its branches are growing from underground level, these branches or stems will eventually develop roots, ensuring more new rosebushes in future years.

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GARDEN TIP NUMBER 6729

Gary A. Gruenhagen

Have you ever been frustrated trying to get the leaves, weeds, or other trash you've raked up into a plastic trash bag? I have. If you leave the bag loose on the ground, it takes six hands to keep it open and handle the rake at the same time. If you drape it inside a garbage can, the air trapped outside the bag takes up most of the space and the first load you drop in pulls the bag into the can. Then, when you finally get the bag full, all of the air has been squeezed out of the can and the bag refuses to come out. There are basically two problems here—how to get rid of the air trapped inside the can (and let it back in again when you remove the bag) and how to keep the top of the bag anchored to the rim of the can.

I solved the first problem by boring some half-inch diameter holes in the bottom and around the sides of a plastic garbage can, four in the bottom and four around the sides. At first I was reluctant to "ruin" the can, but after a second thought, I realized that having the can water tight is more of a problem than having it leak. Now at least water won't collect in it if it's left out in the rain.

The second problem was solved with a piece of twine and a heavy rubber band. I cut the twine to a length that was just short of the circumference of the can and tied both ends of it to the rubber band. Now I can stretch the string over the top edge of the can to secure the bag. The rubber bands deteriorate in the sun after a week or so, but they are easily replaced, and the paper boy keeps bringing me new ones.