



Doña Ana County Master Gardener Monthly Magazine

- Doña Ana & Luna Counties
- U.S. Department of Agriculture
- NMSU College of Agricultural, Consumer and Environmental Sciences

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<http://aces.nmsu.edu/county/donaana/mastergardener/monthlymagazines.html>
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<http://www.lunacountynm.us>

Beginning our **8th Year** of Providing
 Gardening-Related Information & News

• **MAY 2017** •

Vol. 18, Issue 5

PLANT-OF-THE-MONTH

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How to Grow, Maintain, and Divide Bearded Iris

Link: Doris Winton @

<http://www.bhg.com/gardening/flowers/perennials/how-to-grow-maintain-and-divide-bearded-iris/>

Bearded iris is among the most elegant -- and easy to grow flowers of spring. Follow our tips for long-lasting, ever-multiplying blooms.

It's a magical time when bearded irises unfurl their pencil-slim buds to reveal a kaleidoscope of color in spring. Once commonly called 'flags', these perennials flourish in USDA Zones 3-9, where winter temperatures dip below freezing and allow the plant to go dormant before next year's growth.

"Anyone can grow iris," says Doris Winton, who has had a lifelong attraction to the flower and is a Master Judge for the American Iris Society. While fragrance has diminished through hybridization, the size of blooms has increased, as has the palette. "Every color -- except fire-engine red -- can be found in bearded iris," Doris says.

IRIS GROWING TIPS

Plant them in a sunny spot in late summer. The plants need well-drained soil and at least six hours of sunlight per day. A full day of sun is even better to keep the rhizomes dry. (The rhizomes are the fleshy root-like structures at the base of the plant.)

Article Continues on Page 2

Master Gardener Hotline Contact Data

(March 30, 2017 through April 26, 2017)

# Total Contacts	19	Geographic Area	Subject of Inquiry
# Total Issues Addressed	41	Las Cruces	16
Ethnicity of Contacts		Edgewood	1
Hispanic Females	1	Mesquite	1
Hispanic Males	2	El Paso, TX	1
Non-Hispanic Females	7		
Non-Hispanic Males	9		
Asian Female or Male	0		
Black/African Male	0		
		Animals	1
		Disease	2
		Fertilizer	1
		Flowers	1
		General Info	0
		Herbicides	1
		Insecticides	2
		Insects	2
		Irrigation	7
		Lawns	1
		Shrubs	4
		Soil	2
		Trees	7
		Veggies	0
		Weeds	1
		Misc.	9

(Pruning (3), native plants and their care (2), borders for garden beds (1), piñon tree disposal (1), container plants (1), sources of peat moss (1))

Thank you to Certified Master Gardener Laurie Davidson for collecting this data.

Bearded Iris—Continued From Front Page



IRIS GROWING TIPS (Continued)

- Prepare their beds. Doris recommends a low-nitrogen fertilizer and a soil pH slightly less than 7, which is neutral. She applies a granular fertilizer twice a year -- in early spring and just after bloom when the rhizomes are forming the next year's flowers. Water only if it is extremely dry or after transplanting.
- Give them room to breathe. Bearded irises require good air circulation. Plant them a minimum of 16 to 18 inches apart (less space for dwarf irises and more for taller varieties).
- Do not mulch. Mulching retains moisture, and too much moisture will cause soft rot of the rhizomes.
- Break off seedpods that form after the blooms have faded. This prevents seedlings from choking the surrounding soil. Seed formation also saps energy needed by the rhizomes, roots, and leaves.
- Prune back the foliage in the fall. This will reduce the chances of over-wintering pests and diseases.
- Make dividing a habit. Divide clumps of bearded iris every three to four years in the late summer.

How to Divide Bearded Iris

Bearded iris produce leaves, flower stems, and roots from a thick, root-like structure called a rhizome. As the plant matures, the rhizome produces more rhizomes, which in turn lead to more leaves and flowers. Over time, however, the original rhizome withers and dies off. When this happens, bloom production slows and it is necessary to divide the plant, removing and replanting the baby rhizomes so they can develop.

Bearded iris should be divided in the late summer, when the weather starts to cool. The division process illustrated below can be used for other plants that produce rhizomes, including canna, bergenia, dahlia, toad lily, and lily-of-the-valley.



Step 1

Carefully dig the clumps with a garden fork or spade, taking care not to chop into the rhizomes more than necessary.



Step 2

Divide the rhizomes by pulling them apart with your hands. In some cases, you may need to use a sharp knife to separate the baby rhizomes from their mothers. If so, dip your knife into a 10-percent bleach/water solution between cuts.

A good rhizome will be about as thick as your thumb, have healthy roots, and have one or two leaf fans. Large, old rhizomes that have no leaf fans can be tossed.



Step 3

Wash the soil off the rhizomes so that you can inspect each one for iris borer (a fat, white worm). If you find a borer, destroy it. Some gardeners like to wash their iris rhizomes in a 10-percent bleach solution to protect against disease, but that won't help plants that are already rotting.



Soft, smelly, or rotting plants should also be destroyed. Discard any that feel lightweight or hollow, and appear dead, like the rhizome shown here.



Step 4

Clip off the leaf blades so that they're 4 to 6 inches long. This reduces the stress that the plant goes through as it concentrates on regrowing new roots instead of trying to maintain long leaves.

Article Continues on Page 3

Bearded Iris— Continued From Page 2

How to Divide Bearded Iris (Continued)



Step 5

Replant divisions, setting the rhizome higher in the planting hole than the fine roots, which should be fanned out. A bit of the top surface of the rhizome should be just visible at the soil surface.



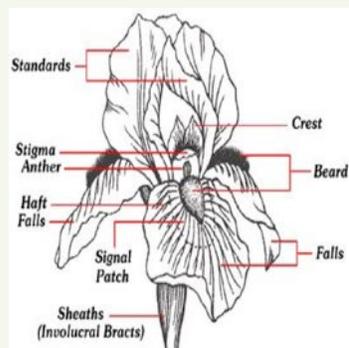
Step 6

Space plants 12 to 18 inches apart (closer for dwarf varieties, farther apart for the largest). For the best display, plant the rhizomes so the fan of leaves face the same direction. Water them well at planting, but do not continue to water unless the weather becomes dry.

SOME GREAT IRISES

Iris flowers have three primary structures, and descriptions of a variety often refer to these parts. For example, in the flower shown below, 'Fringe of Gold', the drooping "falls" are white edged (or picoteed) in yellow. The upright "standards" are solid yellow. And the tiny fuzzy "beard" in the middle is white. You can use these structure names to imagine how an iris might look when you have only a text description.

As a longtime lover of bearded iris, Doris Winton has many favorite varieties, including 'Fringe of Gold'. See Column 2, next page for several more of her favorites. ■



Bumble Bee (Miniature)

Rebecca Perret



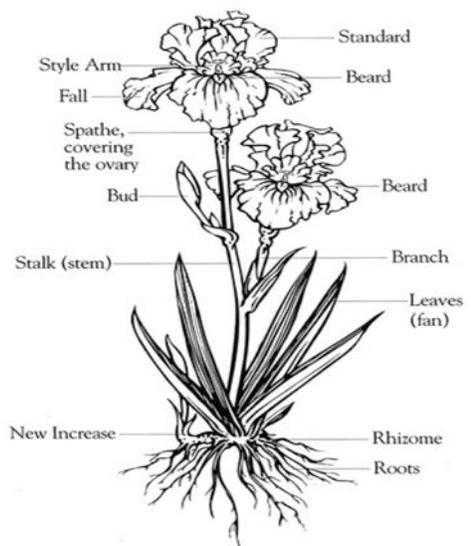
Perfect Pitch

Ozark Dream (Miniature)



Latin Hideaway

Gallant Moment





How to Plant and Grow Bearded Iris

(Contributions by Jim Morris)

Source: American Iris Society @ Link:

http://www.irises.org/About_Irises/Cultural%20Information/Grow_Bearded.html

Bearded irises are relatively easy garden plants to grow and will give good results with a minimum of care, but like all plants, the better the culture the more magnificent the display. The following instructions are easy to implement and should lead to beautiful iris blooms year after year.

When To Plant

For best results, plant iris rhizomes in July, August or September. This is also the best time (plants are normally dormant during the heat of July and August) to divide and replant iris that have become overcrowded, usually after three to five years. It is important that the roots of newly planted irises be well established before the end of the growing season. Plant your iris at least four to six weeks before your first hard freeze or killing frost.

Where To Plant

Irises require at least a half-day (6-8 hours) of direct sunlight. Some afternoon shade is beneficial in extremely hot climates, but in general irises do best in full sun. Iris will grow in deep shade, but probably not flower. Provide your irises with good drainage. A raised bed or planting on a slope are ideal places to plant iris. Good air circulation is essential and water should not stand in the beds.

Soil Preparation

Bearded irises will thrive in most well drained soils. If you have heavy soil, adding humus - compost - or other organic material - will improve drainage. Gypsum is an excellent soil conditioner that can improve most clay soils. The ideal pH for irises is 6.8 (slightly acidic) but irises are quite tolerant of less-than-perfect soils. Lime may be added to acidic soils and sulfur may be added to alkaline soils. Have your soil tested before making any correction.

Planting Depth

Plant your rhizomes at or just barely below the surface of the ground. Irises should be planted so the tops of the rhizomes are visible and the roots are spread out facing downwards in the soil. However, in extremely hot climates or with very light soils, cover rhizomes with up to one inch of soil. Tamp the soil firmly to anchor the rhizomes until new roots begin to grow, and water well. It is a common mistake to plant Irises too deeply.



Watering

Newly planted rhizomes need moisture so their root systems develop. Once established, irises should be watered when the top three inches of soil dry out. The watering frequency will depend to a great extent on your environment. Overwatering of irises is a common mistake. After planting, water well and continue watering until the first good rain. If lack of rain persists, watering should be deep enough to penetrate the shallow root system. Less frequent deep watering is better than frequent shallow watering.

Fertilization

The soil type for your area will determine your fertilizer needs. Superphosphate, or a well-balanced fertilizer with an N-P-K ratio of 10-10-10 or 5-10-10 are recommended. Avoid anything high in nitrogen as it encourages soft growth that is susceptible to disease. Provide a light application in early spring and again a month after bloom. Place fertilizer around rhizomes, not directly on them. Alfalfa pellets (without salt) are extremely beneficial when incorporated in the soil around newly planted irises. Do NOT use Feed and Weed preparations.



General Garden Care

It is extremely important to keep your iris beds free of weeds and fallen leaves so the rhizomes may bask in the sun. Spacing plants so there is good air circulation will help prevent diseases. Break out bloom stalks as soon as bloom season is over. This prevents contamination of your named varieties by chance bee crosses. These crosses would cause seedpods to form that might go unnoticed. If given time to ripen, they might drop seeds to the ground. The resulting new plants are often unattractive. So breaking out bloom stalks right away is a good garden practice. ■

WATER-WISE PLANTS



Ornamental Onion

Sources: *Ornamental Onion* in *Water-Wise Plants for the SW* by N. Serman, M. Irish, J. Phillips and J. Lamp'l, Cool Springs Press, 2007.
And NM Gardener's Guide, by J. Phillips, Cool Springs Press, 2004

Form: Tall, sometimes leafless stems produce round to drumstick-shaped blooms in summer.

Growth & Mature Size: Naturalizing and quickly growing to 6 to 24 inches x 6 to 12 inches.

Uses: Drifts, mass, local point, border, meadows

Soil: Well-drained soil

Pests: None

Description: When you combine the words, “ornamental” and “onion” into one phrase, it raises some questions. How can “ornamental” describe a plant that sleeps underground through winter and in early spring sends out small tufts of not-so-spectacular foliage? Just wait a bit longer, however, and the true show begins. Long, strong stems grow quickly to 6 inches or even 6 feet. Atop each are pom-pom looms in deep, almost lack, purple, sunshine yellow, clear snow white, and shades o red, maroon, pink, and even chartreuse, ranging in size from ½ inch to an enormous 5 inches across. Barely onion scented, beautifully ornamental—they live up to their name.

Cultivation:

- Seeds germinate best in cool soil in both spring and fall, or transplant from containers anytime during the growing season.
- Plant small bulbs in fall at 4 to 6 inches apart, larger bulbs 8 to 12 inches apart.
- If grown in the shade and mulched well, Alliums may be watered once a week while in bloom, and every two weeks in summer after plants are well established.
- A little slow-release fertilizer may be worked into the soil at planting, but once established, they don't need fertilizing.
- Cut the old stems back to the ground some time before they begin to grow in spring.

Shared Spaces

- Ornamental onions are sometimes planted around roses and fruit trees as pest deterrents.
- Globular, rose-pink flower heads make an interesting foil for salvias and the blue spikes of veronica.
- Cluster with whiplash daisy in multiple groups of 5 to 9 bulbs.
- Interplant with yarrow and other bulbs in dry understory areas.
- Plant smaller flowering onions in drifts and use larger cultivars as focal points or background plantings in a perennial bed.



Other Species and Cultivars:

Drumstick onion (*A. sphaerocephalum*) has globular 2-head wide head of lightly compressed wine-purple florets held 2 feet above the ground on slender, stick-straight stems.

'Mount Everest' towers to 3 feet with 3- to 4-inch white flower heads. 'Ambassador' has long-lasting foliage and enormous 8-inch blooms of dark purple flowers.

A. moly ('Jeannine') has yellow blooms and spreads in broad clumps. ■



TROPICAL PLANTS of INTEREST**Hibiscus Potted Tree**

Source: <https://plantcaretoday.com/how-to-care-for-a-potted-hibiscus-tree.html>

The potted Hibiscus tree is a popular plant across the US in the springtime. They find a home on front porches, out on back patios and decks. Personally, I like to see the tropical Hibiscus grown as a tree. For tips on how to care for these colorful flowered beauties. Read on...

What a difference a week makes. The flowers are starting to pop on the Hibiscus trees. It is truly a beautiful sight to see thousands of plants with red, pinks, oranges, and yellows all starting to bust out to show off their colorful flowers.

Growing The Hardy Hibiscus In The Nursery

You'll find "Florist Grade" Hibiscus plants grown as bushes in greenhouses. The outdoor/patio types are grown outside as bushes also, but we find a lot of Hibiscus trees grown or what are called "standards" produced outdoors.

Bush type Hibiscus start life from cuttings. Most Hibiscus trees are started from air-layers. Air-layers are a commonly used propagation method for plant material (that is a whole story in itself).

Stock plants grow in the ground and reach a height of 6-8 feet. The branches are trimmed, removing the side branches making one long straight stem (which stays on the tree) about 36 inches long. The base is then wrapped with sphagnum moss and foil to retain moisture.

Roots form and begin growing into the moss. These air-layers are removed from the stock plants and planted into containers. Each stock plant can produce 50 to 100 plants per year.

After planting the plants are trimmed, and shaped into forming a small tree. This process takes 12 months for a 10" plant. Some growers take 3 or 4 air-layers and braid them together.

Characteristics of the Outdoor/Patio Hibiscus

The outdoor/patio tropical Hibiscus is taller, more open, and has lighter colored leaves than those grown as 'Florist Grade'.

The facilities producing the outdoor/patio type are:

- Outside growing areas (acres and acres)
- Overhead irrigation
- Some method to keep the plants from blowing over in the wind.

Hibiscus Care

- Placing your Hibiscus tree in full sun will produce the most flowers and best growth. Try to keep the plants out of windy areas.
- Hibiscus plants will thrive outdoors where the night temperature doesn't drop below 50°F. Hibiscus are used outdoors in tropical climate landscapes. Avoid excessive cold and hot areas.
- It is important you keep the soil of the patio Hibiscus moist at all times. Saturate the soil at each watering.
- To test and see if you need to water, place your fingers on the top of the soil; if it feels dry to the touch, it is time to water your Hibiscus.
- When growing, outside water your plant at least 3 to 4 times a week.
- Hibiscus requires plenty of water. However, they do not like to sit in water. Avoid overwatering and allowing Hibiscus to sit with "wet feet." To prevent root rot plants should drain completely drain after waterings.
- Avoid using cold water, especially during winter months, when watering your Hibiscus. This tropical plant prefers water around 95°F. Always check the water temperature with your hand to ensure it is not too hot and never too cold.
- Patio Hibiscus responds well to balanced plant fertilizers like this. If you want lots of flowers, you're going to need to fertilize your potted Hibiscus. Select a balanced fertilizer such as a 20-20-20 or a specially formulated Hibiscus fertilizer. Trace elements such as iron and magnesium also help hibiscus thrive. A water-soluble fertilizer at 1/2 strength can also be applied.

Easy Hibiscus Delivers Colorful Results

- Given sun, moisture, good drainage and a temperature which stays above 32°F the year round, Hibiscus will reward the grower with blossoms almost continuously but most prolifically during the summer and fall months.
- Even in the north the gardener need not be without them. They make wonderful large pot plants for a sunny window and may be placed outdoors on the patio in the summer.
- Plants may set too many buds for the root development to support and some or all of the buds will fall for a time. Fertilizing and additional humus will usually take care of this.

Pruning Hibiscus Plants And Roots

- Prune the branches of your Hibiscus to maintain the desired shape. The only reason to prune Hibiscus is to enjoy more flowers and keep the plant in balance. Pruning will also help to stimulate more growth and more shoots.
- To keep your plant looking healthy, establish three to four main branches of the plant. Select the most sturdy and upright branches when pruning and allow those to become the main stems of the plant. Remove any weak or sideways growing branches.
- When repotting, you may want to root prune the root ball. Remove any weak, sick looking or ailing roots gently but firmly. When pruning use the rule of thirds. Never prune more than one-third of the root or the plant. When in doubt, err on the side of caution and don't remove it.
- Hibiscus flowers open daily and last for only one day, after which they die. Your plants will probably have flowers, which opened during transit, fallen off and started to rot.
- This is normal! Simply remove all wilted or unsightly flowers and keep grooming daily. *Article Continues on Page 7*

Hibiscus Tree—Continued From Page 6**Pruning Hibiscus Plants And Roots (Continued)**

- While visiting your garden center keep this in mind. Hibiscus plants are heavy drinkers and aggressive feeders. Look for plants that are full with good color. I've never seen plants get the care they need during their brief visit at the garden center. They will probably need a good drink when they get to their home.
- Plants losing their bottom leaves can be a sign of not enough water and drying out, or plants being in transit too long.

**Lots of Sunshine**

- Plenty of sunshine is necessary to make Hibiscus plants grow sturdy and to produce blooms. To insure good branching, pinch growing tips when small.
- If the pinching is done just above an outside bud, the new growth will branch out into a desirable bush.
- Hibiscus flowers are borne on the young wood, and a heavy pruning is in order every year so that plenty of new growth can develop without the bush becoming too large for indoor growing.
- Hibiscus thrive under fluorescent light culture. Place plants under the tubes, so the top of the foliage does not quite touch the tubes.
- *Hibiscus matensis*, a species with variegated pink, silver and green leaves, has been known to thrive and flower all winter under fluorescent lights.
- A fluorescent unit can be made of two 48-watt tubes. Given much humidity and 12 to 15 hours daily illumination, Hibiscus does well under the lights.
- Growing temperatures should range from 60°F to 65°F at night to 75°F during the daytime.

Hibiscus Pests Control The Usual Suspects

- The pests on Hibiscus are the usual suspects – aphids, red spiders and mealybugs are about the worst that attack.
- There was a big outbreak of whiteflies a few years ago, which commercial growers experienced.
- Control aphids with a natural pest repellent like our favorite Neem Oil or one of the houseplant sprays; red spiders hate high humidity which hibiscus need to thrive, and mealybugs can be wiped out with a spray Neem, or by dabbing them with alcohol.
- Weekly spraying with tepid water keeps the foliage clean and attractive.

**Growing Hibiscus As Patio Trees**

- A tall, bushy plant, three feet tall, will thrive in an eight-inch pot.
- Hibiscus is not particular about soil or potting mix. It will combat root rot and nematodes best with plenty of humus added, and maintaining a neutral pH.
- Soil with perfect drainage with a rich and humusy growing medium will yield excellent results. An African Violet soil like this is usually satisfactory for Hibiscus.

Here is a recipe for Hibiscus potting soil:

1 part garden loam
1 part peat moss
1 part fine bark and sand

- Hibiscus use significant amounts of water, and outdoors during the hot summer plants may require watering every day. This free use of water quickly leaches out plant food in the soil. When using a liquid plant food, fertilizing is necessary every week.
- A plant food with too much nitrogen will produce lots of foliage, and not enough flowers. A well-balanced food or special Hibiscus fertilizer will help plants produce large, well-colored blossoms, and in usual quantity.
- If you purchase a plant that comes in a small pot and the leaves are rather banged and bruised, cut the top back partially to give the roots a momentary rest and then a chance to grow.
- A plant without a good root system cannot be expected to continue to produce a floriferous plant. ■





Top 10 White Flowers

Source: <http://www.birdsandblooms.com/gardening/top-10-lists-for-gardeners/top-10-white-flowers/?10>

Choose white flowers for extra impact in the shade, or for a garden that lights a spark after dark!

White flowers provide a brilliance and contrast all their own. Whether you want to give flowerbeds a more pristine look or make your backyard glow after dark, take a peek at these pure-white blooms.



ANGEL'S TRUMPET (*Brugmansia* spp.), Annual to Zone 10

This shrub-like plant sports beautiful, sweetly scented blossoms that can reach 12 inches in length. The 'Betty Marshall' variety's ethereal trumpet-shaped blooms seem to glisten after dark. The pretty flower is very fragrant at night, but beware: All parts of it are poisonous.



ASTILBE (*Astilbe* spp.), Zones 4 to 9

Its fernlike appearance helps Astilbe fit right into a shade garden—though its flower spikes, which grow from about 1 to 4 feet tall, can't help but steal the spotlight. For a touch of glamour, try 'Bridal Veil'. From afar, the flowers on this and some other Astilbe varieties look like feathers.



CANDYTUFT (*Iberis sempervirens*), Zones 5 to 9

Like a late snowfall, Candytuft brings fluffy white drifts to the spring scene, blooming until the early summer. Its leaves pleasing evergreen foliage year-round.



COSMOS (*Cosmos bipinnatus*), Annual

This cheerful bloom adds a touch of whimsy to both formal and cottage-style gardens. 'Psyche White' has jagged semi-double blossoms that give it a shabby-chic look that lasts all summer. The foliage resembles dill or fennel and makes an interesting contrast with broader leaves on nearby plants. Cosmos grows up to 5 feet tall.



LAVENDER (*Lavandula* spp.), Zones 5 to 10

If you're searching for an elegant bloom, look no further. Gardeners know that there's never a dull moment with Lavender's pleasantly scented spires. The mounding gray-green plants tend to be taller than they are wide and look exquisite in borders. 'Lacy Frills', the first white variety from seed, is cold-tolerant to Zone 6.

Article Continues on Page 9

Top Ten White Flowers—Continued From Page 8



PEONY (*Paeonia spp.*), Zones 3 to 9

With hundreds of Peony hybrids on the market, you have your pick of sizes and colors. Because it needs chilly weather to produce flowers, the peony grows best in areas that get cold winters. If undisturbed, this hardy and lush plant can survive for more than a century with little or no care. 'Bowl of Cream', a favorite white cultivar, features double blooms that make a big statement.



PHLOX (*Phlox spp.*), Zones 3 to 9

For many, the scent of Phlox goes hand in hand with summertime. Some varieties display clusters of flowers, while others are loose and carpet like; most prefer full sun. 'Tiara' has breathtaking double blooms and gorgeous all white 'David' is disease-resistant; both are upright garden Phlox cultivars.



SHASTA DAISY (*Leucanthemum x superbum*), Zones 4 to 9

Although daisies date back thousands of years, the Shasta variety is just over 100 years old. It was named after Mount Shasta, one of California's tallest peaks. The flowers bloom from early summer to autumn and plants range from 10 inches to 4 feet high. We like the tall 'Becky' and dwarf 'Snowcap' varieties.



SWEET ALYSSUM (*Lobularia maritima*), Annual

Believe it or not, this beautiful, low-growing border plant is a member of the Mustard family. Clusters of tiny flowers bloom for months in full sun to partial shade, but they do best in cool weather. After the heat of summer, cut back plants to encourage new growth and more blooms. For a white flowerbed addition, try 'Carpet of Snow'.



YUCCA (*Yucca filamentosa*), Zones 4 to 11

Columns of bell-shaped buttery-white flowers add a soft contrast to the spiky evergreen leaves of this drought-tolerant plant.

Growing 3 to 12 feet tall when in bloom, Yucca makes a stunning showpiece in any garden. ■





10 Garden Plants Used for Making Homemade Balms and Ointments

Dave's Garden.com | Tricia Drevets | January 11, 2017

Treat all kinds of minor skin wounds and irritations with just a few plants you can cultivate on your own!

We grow plants for many reasons — for food, for flavoring, for insect protection, and for the beauty they provide. Certain garden plants also have been used for medicinal purposes for many centuries, but did you know you could also make your own balms and ointments with some of them?

Herbs and plants are an important ingredient of many beauty products, so it should come to no surprise that you could use your own garden to create many homemade products. Not only will you save money, but you also will have the satisfaction of using what you grow to benefit your family's health and well being.

Here are 10 plants to get you started!



ALOE VERA (*Aloe Barbadensis Miller*)

Aloe Vera grows wild in tropical locations around the world, but it also does well as an indoor potted plant. The gel inside this easy-to-grow succulent has been used for centuries to treat burns, eczema, and other skin irritations. In fact, Ancient Egyptian pharaohs were often entombed with Aloe Vera, which was known as the "plant of immortality."



ARNICA (*Arnica Montana*)

Arnica, a daisy-like herb, provides relief for sore muscles and reduces inflammation and pain caused by sprains and strains.



CALENDULA (*Calendula officinalis*)

Also known as Pot Marigolds, Calendula can form a salve that promotes the healing of rashes, minor cuts, and burns. It also is effective on chapped lips.



CHAMOMILE (*Matricaria chamomilla*)

Chamomile's delicate white petals provide several healing benefits for the skin, including softening, deodorizing, and disinfecting.

Article Continues on Page 11

10 Garden Plants Used For Making Homemade Balms and Ointments—Continued From Page 10



COMFREY (*Symphytum officinale*)

Once they learned of its abilities to treat skin wounds, crusaders brought Comfrey home to England from the Middle East. When used in a salve, it stimulates cell growth and is useful in treating both dry skin and swelling. (Be sure to read the article on [Comfrey](#), Page 28)



CUCUMBER (*Cucumis sativus*)

Cucumbers offer hydrating and healing properties for the skin. A facial mask made with fresh Cucumber helps clear clogged pores, relieve blemishes, and moisturizes dry skin. Cucumber slices also help relive eye puffiness and under-eye circles; it's not just a weird thing done in movies and TV!



ECHINACEA (*Echinacea purpurea*)

A North American species in the Sunflower family, Echinacea can soothe swelling and dry, irritated skin and fight the bad germs responsible for persistent acne.



LAVENDER (*Lavandula angustifolia*)

Simply inhaling the lovely fragrance of Lavender is therapeutic, but it also has antiseptic and antibacterial properties when used in a salve. As a face wash ingredient, Lavender helps clear acne and can promote the healing of skin wounds.



MINT (*Mentha*)

Mint has anti-inflammatory properties that makes is useful as a skin cleanser. It also soothes inflammation and can help teat acne and rashes.



PLANTAIN (*Plantago major*)

Historical records show that the Ancient Greek doctor Dioscorides used Plantain to treat inflammation and burns. Today, natural health advocates use it to soothe and to help heal insect bites and stings, poison ivy, and sunburn. ■



14 Garden Plants That Can Feed Your Pets

Dave'sGarden.com | Tricia Drevets | January 2, 2017

Feed your gardening hobby and your pets all at the same time! Fresh vegetables are an important part of our human diet, but they also are essential for the health of our animals. They provide essential vitamins and minerals and protect their cells from disease. By growing some of your own plants for your pets, you cut down significantly on your pet food costs, and your animals will gain the health benefits of fresh veggies. An added bonus is that most pet-friendly plants are easy to grow.

Here are 14 garden plants that you can safely grow to feed your furry friends. *Note: Always check with your vet before making major changes to your pet's diet.*

All Animals Wheat and Barley Grass

These all-purpose grasses are easy to grow and maintain, and they are an excellent source of antioxidant nutrients, vitamins A, B-complex, C, E, K, minerals, amino acids, and even a bit of calcium. But the best part? Most animals love them. Cats will nibble grass right out of a container in a sunny windowsill, or you can feed it in clumps to your rabbits.



DOGS Although they love meat, dogs are omnivores, so a dog's healthy, balanced diet will always have vegetables make up about a third of the meal. Dogs also be fed some fruits and vegetables for easy, nutritious treats.

o **Melons** On a hot summer day, my dog begs for watermelon. Turns out, she knows what is good for her. Watermelon is a good source of *lycopene* for dogs and provides thiamin, vitamins A, B-6, and C. Plus, it is hydrating! Cantaloupe is packed with vitamin A and beta-carotene, both of which are good for your dog's health. However, if you feed either of these melons to your pooch, remove the rinds and seeds first.

o **Green Beans** Steam these easy-to-grow garden plants before offering them to your dog. Green beans provide important Omega-3 fatty acids and vitamins A, C, and K, and since they are low in calories, yet high in fiber, they are great for dogs that need to lose a little weight.

o **Spinach** The boost of iron gained from adding spinach to your dog's diet helps your pet fight any inflammatory and cardiovascular problems and may help prevent certain forms of cancer. Spinach also is a natural source of calcium.



CATS Cats are *obligate carnivores*, so meat must be their main food source. However, they too enjoy fresh vegetables in their diet on occasion. These plants should usually be offered as treats for your cat or meal additives, not as a replacement for a regular meal.

o **Carrots** Cook and dice carrots before mixing them in with your cat's meaty entree. Carrots are a great source of healthy beta-carotene as well as other important vitamins and minerals. Never serve your cat raw carrots, as they present a choking hazard.

o **Peas** Mash some cooked peas into kitty's regular food for a healthy boost of proteins and carbohydrates. In some cases, peas have even been known to help with gastrointestinal problems in cats. Any variety of peas will be fine for your cat, but since the pods will likely be too tough for them, feed them only the peas themselves.

o **Broccoli** Kitties like to nibble, and when your cat nibbles on steamed broccoli, she will gain a blend of healthy antioxidants that will boost her immune system.



RABBITS Contrary to what most people think, rabbits are not strictly herbivores. Rabbits are classified as *obligate herbivores*, which means, in terms of diet, they are the opposite of cats. Plants must be their main food source, but they can also eat meat. Since rabbits are voracious eaters, growing some of your own bunny food will save you quite a bit of expense.

o **Herbs** As many gardeners have found out, sometimes to their displeasure, rabbits love herbs, so if you have pet bunnies, why not try growing some herbs just for them? They will love the taste, and they will gain all the nutritional benefits. A few of their favorites are basil, chamomile, cilantro, dill, oregano, mint, parsley, sage, thyme, and rosemary.

o **Dandelions** I grow dandelions and clover whether I want to or not, so it is good to know that they are good bunny food. In fact, those pesky dandelions contain more beta-carotene than carrots and more iron and calcium than spinach. Just be sure these plants come from a lawn that has not been treated with chemicals before you feed them to your rabbit.

o **Marigolds** Marigolds are a great addition to any rabbit lover's garden. They are colorful, easy to grow, and rabbits love them. In fact, your hungry bunnies will eat them—flowers, leaves, stems, and all! Select the *Calendula* species of marigolds (Pot or English marigolds) as other varieties have a much stronger scent that may actually repel rabbits.

o **Leaf Lettuce** You know bunnies love lettuce, but for their health, did you know that the darker it is, the better? The good news about growing lettuce for rabbits is that they are not as fussy about taste as we are. They will eat an enjoy lettuce even after it has bolted.

Although we all are familiar with the image of Bugs Bunny munching on a carrot, feed them sparingly to your pet bunnies! Carrots are high in sugar and can cause digestive upset when eaten in excess. *Article Continues on Page 13*

Plants to Feed Pets—Continued From Page 12



GOATS It is in the popular mindset that goats will eat anything, but when they nose around things like your clothing, a box, or a can, goats really are just investigating whether it is edible or not.

Goats are herbivores and ruminant animals, which means they chew cud. They enjoy hay and grass, but you also can grow other plants for your goats' benefit!

- o **Vetch** This fast growing cover crop is in the family of legume flowering plants. It actually helps the nitrogen levels in your soil and provides a solid protein source for your goats.

- o **Root Vegetables** Goats enjoy eating the leaves, roots, and leaves of beets, carrots, turnips, and radishes. As they munch, they will be getting valuable vitamins and minerals.

- o **Pea and Bean Vines** Harvest the peas and the beans for your family, and then let your goats nibble on the vines for the nutritional benefits.



What Not to Feed Your Pet

Some garden plants are not safe for your animals to eat. These include tomatoes, potatoes, rhubarb, and onions. Certain varieties of flowers are even toxic to most pets, including clematis, crocus, daffodils, day lilies, foxglove, morning glory, narcissus, and lily of the valley. Not all parts of a plant may be toxic, however, but it is best to keep these away from your pets as best you can.

Symptoms of plant poisoning include sudden vomiting, diarrhea, heavy breathing, and listlessness. Call your vet immediately if you suspect poisoning, and if you think a certain plant is the cause, take part of it with you to the vet's office. ■



Ways To Use Cardboard To Simplify Your Garden Tasks

Most of us come into contact with cardboard every day. Made of processed and broken-down wood fibers bound back together, this material decomposes easily. That's a quality gardeners can take advantage of. So before you throw that piece of cardboard away or toss it in the recycle bin, check out our suggestions for great ways to reuse it in your garden.

- **Eliminate Weeds In Your Garden**

Did you know that cardboard could actually help prevent weeds from resurfacing? This is an organic gardening trick that has been used successfully for decades.

Break down a corrugated packing box and lay it on unwanted grass or tough-to-kill weeds to choke them out. All you have to do is lay the cardboard right on top of your weeds. (Do make sure that all the packing tape has been removed.) Weigh it down with a brick and you'll smother them in about a month

Add a layer of mulch on top for a neat, clean look. Just keep the cardboard at least 4 inches away from the base of plants you want because water flow, air movement and microbial activity may be restricted in the soil beneath until it decomposes



Since your weeds will not have sunlight to grow properly, your garden will require less maintenance and you will notice that your weeds do not grow back! Pretty simple, really. Plants (weeds are plants) require sunlight for photosynthesis. Take away the sunlight... no more weeds. Cardboard provides an extremely darkening barrier, blocking weeds as good as or better than any commercial weed-blocking products I've tried.

Article Continues on Page 14

Using Cardboard in the Garden—Continued From Page 13**o Cardboard Makes Watering Easy and Efficient!**

Don't you hate how when you water your plants, you're watering weeds too? No more!

Just water the cardboard and the plants that stick through get watered. If you're still dealing with seeds, the water only goes through the holes you punched. If you're using the sensitive plant box planting method, don't water anywhere outside of the box and you'll waste nothing.

As a bonus, the cardboard will help keep your seeds moist for longer periods, reducing the overall need for watering.

o Cardboard Makes Planting Easy! Really, it couldn't get any easier.

- Lay broken down cardboard boxes on top of garden beds. Make sure they're nice and flat.
- Punch a hole through the cardboard (easier if it's a little wet).
- Drop in the seed.
- Put a small layer of soil on top. (This is totally optional... I don't.)
- No need to trowel rows. No guessing what the spacing is. If you like, you can even draw on the cardboard to lie out the entire bed. How cool is that?

o Cardboard Lets You Plant Earlier!

Speaking of cool, is it a bit chilly for your tomatoes, eggplant, or peppers? It's always better to plant early and get plants established before the summer weeds come in. No problem. Use cardboard!

- Break out the floor of your cardboard box.
- Dig a square hole the width and length of your box, and about 1/3 of the box depth (or 4-6 inches) into the ground.
- Place the box in the hole.
- Fill the box with the dirt you removed so the ground level inside and outside the box is the same (or close).
- Plant your sensitive plant in the box frame.
- On cool nights, flip the top flaps of the box shut to protect your sensitive plants.
- When all danger of cold is gone, pull out the box and use it as mulch.

o Pots For Seedlings

Fill little cereal boxes with soil and you have an inexpensive and biodegradable pot for seedlings. They'll tear off easily for planting, and you can mix the leftover pieces into your compost. The cereal boxes and other cardboard food packaging have safety standards to adhere to, so the inks and glues should be okay for the compost.

**o Create a Better Soil by Mulching**

If you put cardboard in your garden and cover it with quality soil, the box material will decompose and create a richer, more nutrient rich soil than you had before.

Depending on what the area you live in, (rain, moisture, sun, etc.) this mulching process can take anywhere from 4-12 months for the boxes to disappear and to fully enrich the soil.

o Cardboard Makes Composting Easy!

The best way to feed your plants is slow and steady, right? Cardboard encourages you to do that in a few ways:

1) Feel free to heap up leaves and grass clippings at the end of the season and bury them under next year's cardboard. Why under cardboard? Worms and crickets feel safe with something like cardboard to hide under. They VERY QUICKLY break down organic material into useable 'fertilizer' that is great for your plants. They even make the soil directly under the cardboard nice and fluffy.

2) If you need a quick nitrogen or nutrient boost for your plants, just shove some grass clippings or stuff some banana peels under the cardboard. No rotting grass stink. No problems if you get a weed seed in there.

• Grow Mushrooms in Your Boxes:

At a company called "Mushroom Adventures" you can easily grow mushrooms using your moving boxes. Typically in 2-4 weeks, you will see fabulous mushrooms growing from the same boxes you moved with. What could be better than that!

• Grow Sprouts:

Order sprouts from a seed supplier and plant them in your boxes. Remember to have enough sunlight for your sprouts to grow with the maximum level of nutrition.

• Grow Vegetables:

If you live in apartment and have a deck, you too can grow vegetables such as carrots, tomatoes and broccoli in cardboard containers. Since they are being grown in a box, which helps to retain moisture, they will need less watering and are easier to maintain.

Breaking It Down

These tips are, of course, based on personal experience using cardboard boxes. Maybe you won't love it as much as I do. Just keep an open mind about its appearance. Go ahead and mulch over it if cardboard is too unsightly for you or your snobby rich-kid neighbors. ■

CARDBOARD IN GARDEN REFERENCES

5 Ways Cardboard Simplifies Your Garden, 'Smart Living Network', Link:

<https://www.smartlivingnetwork.com/gardening/b/5-ways-cardboard-simplifies-your-garden/>

8 Great Ways to Reuse Cardboard in Your Garden, Jennifer Howell, in 'Garden Gate Magazine', December 2016

How to Reuse Cardboard Boxes for Gardening, Kirstie Beranski, Link:

<http://blog.moverscorp.com/moving-boxes-2/how-to-reuse-cardboard-boxes-for-gardening/>



How to Make Mulch from Wine Corks

Becky Striepe | Crafting A Green World | June 2014

Are you a wine cork hoarder like I am? Here's how to make mulch using your stash of wine corks and which sort works best.

Before I walk you through how to make mulch, it's important that you choose the right kind of wine cork for this project. There are a couple of sorts of wine cork, and only one of them works for this project. You want to make certain that the corks you're using are natural cork.

Some winemakers have switched to synthetic (plastic) corks, and those don't work as well for mulch. That's because plastic doesn't break down. You also don't want plastic mulch on your food plants, because chemicals from the plastic can leach into the plants. Here's a labeled photo of some corks from my stash:



As you can see, some synthetic corks can look a lot like natural ones, but don't worry! You can tell by feel. Natural cork has a rough surface, but synthetic feels smooth to the touch. The feel it method is definitely the best way to check out the synthetic vs. natural corks in your wine stash.

One more *caveat* about making cork mulch: My husband tells me that cork mulch is something he's seen recommended as a way to kill rats. The tutorial he read said to cut up cork and dip the pieces in grease. It also advised you not to do it if there were any other animals around because they'd eat it and die. If your fur kids like to eat mulch, this make sure you're only using it in pots that they can't reach.

Now that you know how to find the right corks and how to use your cork mulch safely, let's make some!

Instructions: Make Mulch from Wine Corks

The directions below have two options for making your mulch. One is manual and the other uses a high-speed blender. My *Vitamix* worked great for this project, but you're definitely putting corks into your blender at your own risk! If you're nervous about messing up your blender, stick with the manual technique.

Materials

...Wine corks The more the merrier! It took about 50 corks to make enough mulch for one 18" potted plant, but I did a deep layer of mulch. You could probably stretch that amount of mulch to cover up to a 24" pot.

...Serrated knife and cutting board (for the manual method)

...High-speed blender (for the blender method)

...Plant that needs mulch

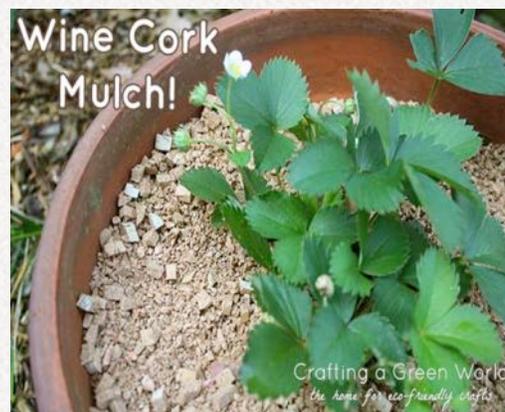
Directions

Sort your corks. See the info above on how to spot those natural corks. You want all natural wine corks to make your mulch. Save those synthetic corks for another project.

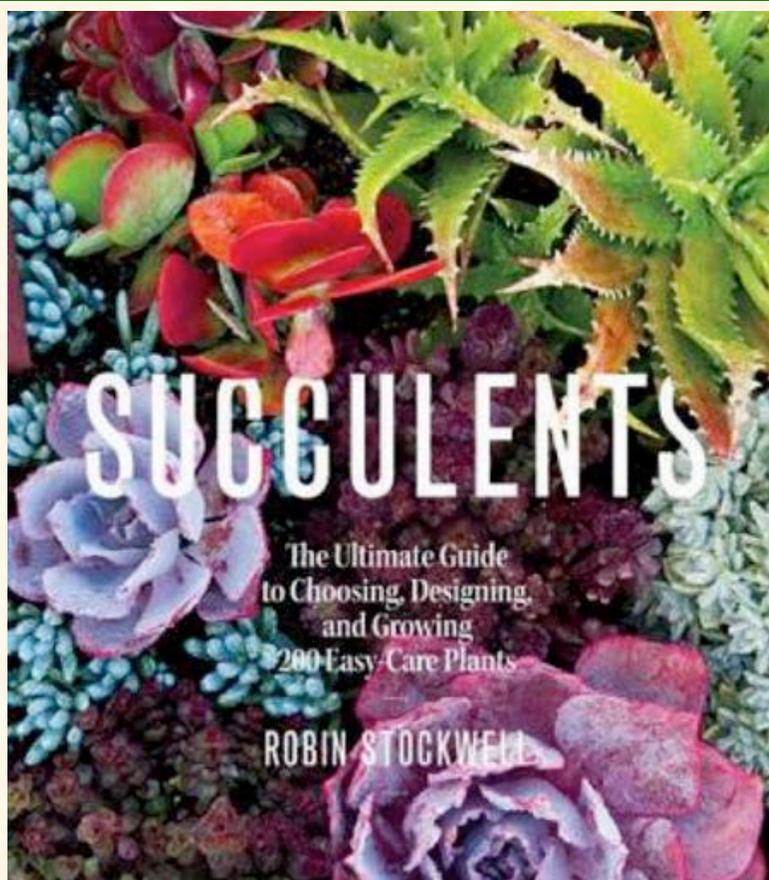


How to Make Mulch: Manual Instructions:

- Get cutting! Chop those corks up. You want to cut your corks up into about 1/4" pieces. That's a good size to let water filter down but not let too much evaporate off. The point of mulch is to help those plants retain precious water.
- Keep cutting. I know, it takes a long time. Put on your favorite podcast, and chop, chop, chop.
- Mulch those plants! That's it. Once you've chopped up the mulch amount that you need, spread it in a layer over your plant. ■



See Page 29 for Instructions on Making Cork Mulch With a High Speed Blender



SUCCULENTS:

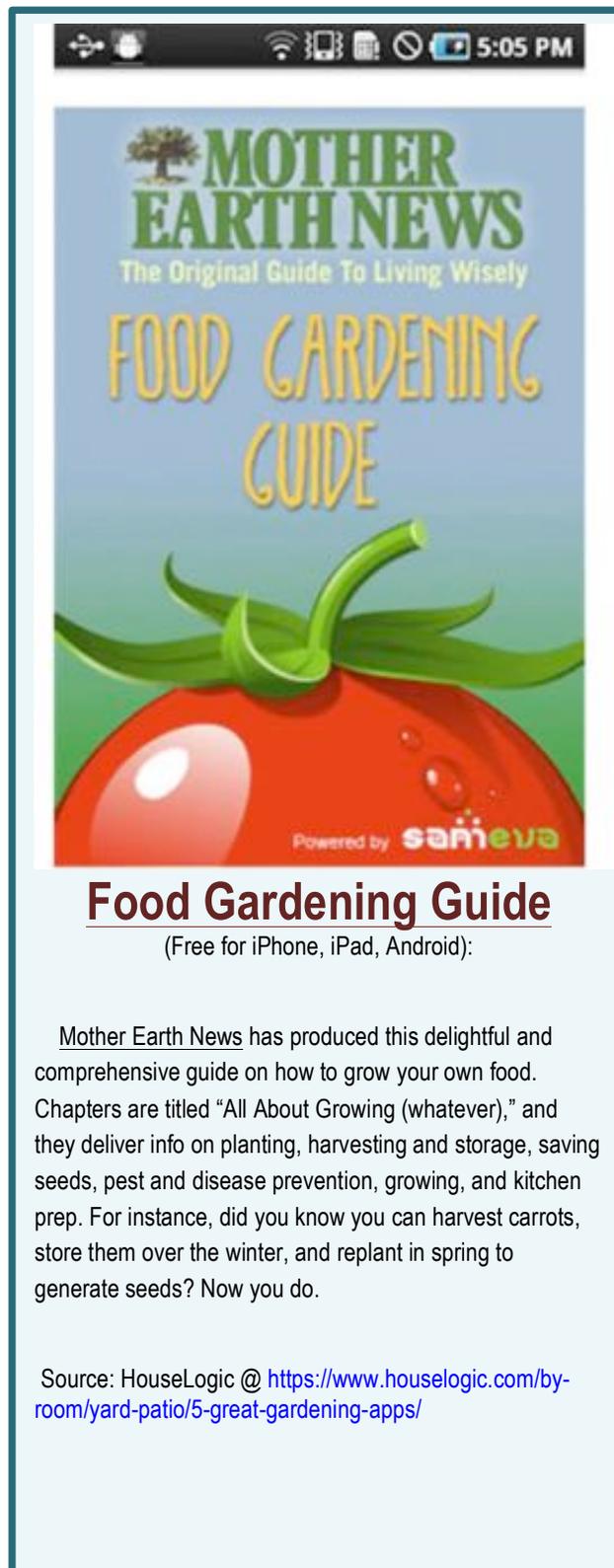
The Ultimate Guide to Choosing, Designing, and Growing 200 Easy Care Plants
 Robin Stockwell | (Sunset) Flexibound | January 31, 2017

Inspiring, practical and richly photographed, this comprehensive guide offers creative ideas and DIY projects using beautiful low-maintenance, water-wise plants

Succulents are the ultimate easy-care plant: versatile, effortless to grow both indoors and outdoors, and drought tolerant. From Aloe and Agaves, to Senecio and Taciveria, this handbook by leading garden expert Robin Stockwell highlights 200 of the easiest, most useful, and gorgeous plants, and shares advice on care and cultivation. Readers will find inspiration for imaginative and exciting new ways to use succulents in striking garden designs, containers, vertical walls, and indoor arrangements, as well as step-by-step projects, such as living bouquets and terrarium ornaments.

This is the essential reference for landscapers, home gardeners, and anyone looking for a thorough introduction to the perfect plant for modern times.

Source: Amazon.com



Food Gardening Guide

(Free for iPhone, iPad, Android):

Mother Earth News has produced this delightful and comprehensive guide on how to grow your own food. Chapters are titled “All About Growing (whatever),” and they deliver info on planting, harvesting and storage, saving seeds, pest and disease prevention, growing, and kitchen prep. For instance, did you know you can harvest carrots, store them over the winter, and replant in spring to generate seeds? Now you do.

Source: HouseLogic @ <https://www.houselogic.com/by-room/yard-patio/5-great-gardening-apps/>



Honey-Do List for May 2017

Much of our suggested garden task information comes directly from *Month-by-Month Gardening in the Desert Southwest* by Mary Irish (2002). We wanted you to know that this is an outstanding gardening resource book. Also, some of our recommendations come from *Southwest Planting Tips by the Month* and the *Tucson Gardening Calendar* both of which are produced by the Tucson Botanical Gardens. Another resource used in our Honey-Do Lists is *The Desert Gardener's Calendar: Your Month-by-Month Guide* by George Brookbank (1999.) Recommendations from Sunset Magazine's monthly *Southwest Garden Guides* may also be included.

GENERAL: If you live in sparsely populated areas, cut down dried grasses and weeds that are growing within ten feet of your house or in nearby vacant areas in order to reduce the possibility of wildfires occurring in your area



ORNAMENTALS

- Continue planting container-grown plants but provide extra water and shade as May temperatures rise.
- For spring and summer flowering bedding plants, fertilize every 2 to 4 weeks using a product with higher phosphorus content.
- As irises complete their bloom period reduce irrigation to allow rhizomes to "rest."
- Continue to fertilize bulbs until leaves begin to die back, then discontinue for the rest of the summer.
- Deadhead flowers.
- Pinch back chrysanthemums and others to maintain a compact form.

FRUIT, NUT, CITRUS & SHADE TREES

- Increase watering frequency as temperatures rise; water to a depth of 18 inches.
- Continue zinc sprays to pecans.
- Continue cover sprays to pome fruits (e.g. apples, pears, etc.)
- Harvest fruit as soon as it ripens and remove buggy or diseased fruit promptly.
- Protect young trees from sunburn with shade cloth or tree wrap.
- As temperatures rise, begin planting palm trees. Water newly planted palms frequently until established, then reduce frequency to about once every 2 weeks; fertilize established palms with a product formulated specifically for palms.
- If birds are a problem on fruit trees, cover them with bird netting just as fruit begins to increase in size. It is very important to spread the netting before the fruit begins to ripen as birds may poke holes in the fruit and ruin it.
- If you don't have an irrigation system, build up basins that extend to the drip line around trees. Fill basins with water regularly.



VEGETABLES, FRUIT & HERBS

- Pinch back side shoots on tomatoes to increase fruit production.
- Shade plants to reduce beet leafhopper pressure and sunburn.
- Keep an eye open for signs of curly top on tomatoes and peppers. Remove infected plants promptly.
- Lightly fertilize summer herbs such as basil, oregano, and mints.
- Plant sweet potato slips.
- Continue planting summer vegetables such as corn and squash.

LAWNS / TURF / ORNAMENTAL GRASSES

- Continue planting warm-season turf species. Keep plantings moist but not soggy.
- Fertilize established warm season turf. Apply 1lb N/1000 ft².
- After mid-month, discontinue fertilization of cool-season grasses.
- Depending on temperatures and winds, water at least once a week to a depth of 6–8 inches.
- Mow as needed to maintain desired turf quality. Mowing height also influences rooting depth so mow at the greatest height recommended for your turf species.
- If needed, apply a pre-emergent herbicide to established turf for control of late summer weeds. READ THE LABEL CAREFULLY! Water well after application.



Honey-Do List for May 2017—Continued

CACTI & SUCCULENTS

- Separate yucca and agave “pups” from parent plant. Allow agave pups to dry in the shade for a few days before replanting.
- Continue to cut back frost-damaged cactus. To maintain size and shape of prickly pear, remove young pads.
- Continue to set out warm-season succulents. Water newly planted succulents weekly and established ones every 2–3 weeks, but be sure they are not getting sunburn. Pale surfaces or yellowed patches that appear suddenly are often signs of sunburn.
- Divide aloes by cutting out plants along the edge until you have reduced the size of the clump by at least one-half.
- Yucca should not be pruned unless it is necessary to remove dead or diseased stems.
- Water large cactus, ocotillos, and large yuccas at least once a month from now through September. Water agaves, smaller yuccas, prickly pear and smaller cactus every three weeks throughout the summer. Barrel cactus and beaver-tail prickly pear do not need as much water as most other succulents, but watering them every 5-6 weeks in the summer retains their vigor.
- Succulents planted in the ground do not need frequent fertilization. Fertilize container-grown succulents with a water-soluble fertilizer once in May. Use it at half strength of what is recommended for houseplants.
- Look for signs of dry rot on prickly pear. Remove any affected pads and discard them.



Some of the above recommendations came from the Tucson Botanical Garden's monthly "Calendar of Care" for cacti and succulents.



ROSES

- Continue to plant container-grown roses this month. Plastic pots are better than clay; clay allows for evaporation on all sides of the pot and this can dry out the rose during the summer.
- Water roses and other plants that are susceptible to powdery mildew early in the day.
- Many roses begin to slow down as the weather heats up. If roses are planted in areas that receive over six hours of afternoon sun or are in an area of reflected heat (e.g. near a wall or side of the house), you may want to provide some artificial shade (e.g. shade cloth or box frame) during the summer.
- As temperatures rise, if you have been using a liquid fertilizer, switch to a granular or slow-release fertilizer on roses or discontinue fertilization completely until September.
- Apply heavy mulch, up to 6" around your roses, but keep mulch away from the rose's main stem to avoid too much moisture on it.
- Roses like abundant water, but will decline quickly if kept continuously wet. Water frequently, but let the soil dry out slightly between waterings. Once the soil is dry 6" below the surface, it's time to water again, usually every 3-4 days to a depth of 16"-18". Roses kept in pots, may need daily watering.
- Regularly wash off roses to control powdery mildew, aphids and spider mites. Aphids can easily be removed by hand, a strong jet of water or soapy water spray **but spray early in the day as you may burn the leaves** when the sun is out.
- Do not prune roses in May other than to remove spent flowers or diseased or dead canes.

It's always important to correctly identify any pest or insect you suspect may have caused damage to your plants. If you do not know what the culprit is, collect one in a plastic bag or small jar and take it to the Doña Ana County (DAC) Cooperative Extension Office that is now located at 1170 North Solano Street, Suite M, in Las Cruces (at the corner of Spruce & Solano Streets.)

Our new Hotline Office is located in Room 1833 in Suite M. Our Hotline number remains the same. (575) 525.6649

PESTS

- As temperatures rise, so do spider mite populations. Put a sheet of white paper under a suspect stem or leaf, tap the leaf, and look for tiny red specks scurrying around on the paper. Blast plant with water or spray with an appropriate insecticide.
- Regularly wash off roses to control powdery mildew, aphids and spider mites. Aphids can easily be removed by hand, a strong jet of water or soapy water spray but spray early in the day as you may burn the leaves when the sun is out.
- Irises can be invaded by the iris borer. Symptoms include a sudden decline of a flowering stalk or failure of the buds to open, coupled with a dark, watery mass on the leaves. Cut off and destroy the infected part and the insect inside. It is possible to use systemic insecticides to prevent infestations, but they must be applied according to package instructions.
- Watch out for hornworms/corn earworm and other caterpillars. Handpick or treat with an appropriate *B.T.* preparation.

MISCELLANEOUS

- Mulch plantings to reduce both water loss and weed competition.
- Water all annuals from below, rather than spraying foliage. This helps prevent leaf diseases from infecting your plants.
- Take time to record successes and failures of cool-season crops in a garden journal. Also note current crop growth and development.

REMINDER!

Next MG Monthly Meeting scheduled for:
Wednesday, May 10, 2017

Location: Branigan Library, Roadrunner Room

Our meeting time is 9:15am to 11:30am

Please see Page 32 for information about the
NMSU Plant Diagnostics Clinic

2017 Special Event Notices

La Semilla Community Farm Workshop Series \$10, includes lunch

Location: La Semilla Food Center & Farm, One Way Road, Anthony, NM; RSVP required; Contact: cristina@lasemillafoodcenter.org

- Growing for Native Pollinators Tuesday, May 9, 8:30-12:00
- Integrated Pest Management Tuesday, May 30, 8:30-12:00

26th Annual Desert Horticulture Conference **June 2**

\$100 per person until May 12, 2017; \$85 per person if three or more people register per one organization by May 12, 2017; \$150 per person after May 12, 2017 (Location: Tucson, Arizona)

Conference Schedule Link:

<https://cals.arizona.edu/deserthort/sites/cals.arizona.edu/deserthort/files/DH%202017%20schedule%20%202%203%202017.pdf>

International Master Gardener Conference (Portland, OR) **July 10-14**

Luna County Master Gardener Classes **Aug. 17 - Nov. 2**

12 Weeks, \$50 per person. Thursdays, 5:30-7:00pm

2018 State MG Conference (Sandoval County) **Aug. 31-Sept. 2**

For more info, contact DAC Cooperative Ext. Office: (575) 525.6649



GOT IDEAS? If you have a gardening-related article or a suggestion about a Plant-of-the-Month, a vegetable or fruit, tree, invasive plant or weed to share for our MG Magazine, please send me a link or email your idea to me.

MG CONTACT INFORMATION Be sure your email address is current so that you will be able to receive important information throughout the month from the MG Program. I regularly update our MG Contact List. If you need a copy of this file, let me know.

MG MAGAZINE DEADLINE The deadline for submitting articles and information for inclusion in our **June 2017** MG Monthly Magazine will be **Tuesday, May 30, 2017**

Contact Info: Ann Shine-Ring, Editor
asring@powerc.net
(575) 640-7177



SWEET PEPPERS

Peppers - *Capsicum sp.* Family - Solanaceae

Darrol Shillingburg, DAC Certified Gardener

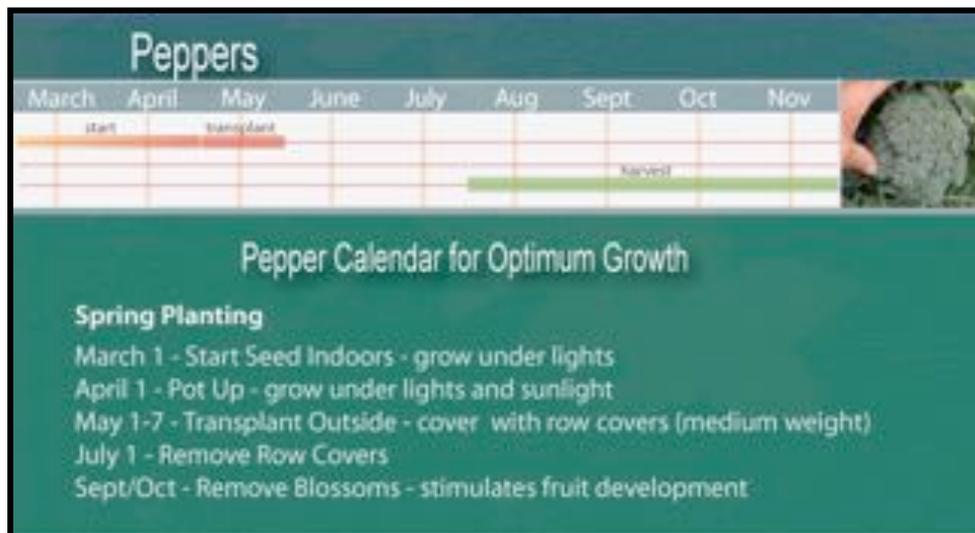
Although there is no one secret to growing peppers successfully in the home garden, you can best increase your odds of consistently abundant harvests by keeping the plants growing vigorously at all stages of development. To do that you need an understanding of pepper plant requirements from seed to harvest.

Peppers are a warm-season crop that grows best with daytime temperatures between 70-75°F. Since our daytime temperatures exceed that range during the pepper season, plants are often heat stressed. Since sweet peppers are less tolerant of high temperatures than their spicy relatives, they produce best in our climate with partial shade.

Timing Even with our long growing season timing your pepper crop is very important. Seeds should be started indoors under lights in early March so the plants have six to ten weeks of growth before transplanting out into garden beds. The chart below gives a general schedule for starting, transplanting and harvesting peppers for Las Cruces. The schedule works equally well for both hot and sweet varieties.

I find the most critical time for peppers is during germination and early seedling development. Seeds are slow to germinate at temperatures below 75°F, but will tolerate a temperature range between 65-95°F. Optimum germination temperature is 85°F. After germination they are susceptible to chilling, so water your seeds and seedlings with lukewarm water to prevent chilling. Pepper seeds can be stored for four years in a cool dry place, but lose germination vigor quickly if stored where they are warm. So, store them properly or purchase new seeds at least every other year.

Seedling Tips Pepper seedlings require stronger light than tomatoes, so place them closer to the light source. Keep nighttime temperatures above 60°F for best growth and fruit production later.



Sweet Peppers—Continued From Page 20

Below The Surface Peppers have a fairly shallow and fibrous root system that can spread out three feet from the stem and penetrate to a depth of 24 inches (in ideal soils). Because of this root system they are less drought tolerant than tomatoes - particularly true of the smaller pepper varieties. Plant spacing can vary from 10-18 inches depending on the size of the adult plants. I plant small types like Jimmy Nardello's on 10" centers and the larger California Bells on 16" centers - your spacing will vary with varieties.

Transplanting It's important to set transplants deeply - up to the first set of true leaves but no deeper. Peppers grow best in rich organic soil with abundant organic material (how often have you hear that?) If you are growing organic, amend the soil with finished compost, rabbit and chicken manure in the fall before planting - giving plenty of time for aging. If that's not possible add finished compost, a phosphorous source such as soft rock phosphate, bone meal, or composted bio-solids and a nitrogen source such as cottonseed meal a couple of weeks before planting. To produce abundant large thick walled fruits, peppers require adequate phosphorous and potassium. Our soils generally have adequate amounts of available potassium (unless your soil test shows otherwise), but needs additional phosphorous.

Drip irrigation Drip is the best option for garden peppers. You can put the drip lines under black plastic if planting early in the season, or you can bury soaker lines to reduce or eliminate clogging from excessive mineralization. Mulching with an organic (cooling) mulch is necessary here as soil temperatures above 85°F will retard plant growth in peppers.

Irrigation Tip - During blossom set and fruit development are critical times to avoid water stress.

**Blossom-End Rot****Sun Scald****Curly Top Virus****Verticillium Wilt**

Above The Surface Like their roots, pepper flowers are also temperature sensitive. You'll see blossom drop when daytime temperatures exceed the low 90s°F, or nighttime temperatures remain above the low 80s°F (not a frequent occurrence here), or if nighttime temperatures drop into the 50s°F (not here, during the pepper growing season). Pollination is reduced by cold daytime temperatures (in the 50s°F) which results in reduced seed development and resulting smaller fruit size. The cause of small fruit size here is generally lack of adequate soil nutrients.

- Pepper fruits, like tomatoes are subject to both **blossom-end rot** and **sun scald**.
- **Blossom-end rot** is caused by a deficiency of calcium in the developing fruit brought on by either insufficient available soil calcium or inadequate water for the uptake of calcium (generally the latter is the real culprit).
- **Sun scald** can be reduced in most varieties by encouraging abundant foliage growth with adequate soil nitrogen and can be eliminated entirely by using a "row cover" shade cloth over the plants as the fruit matures. (a middle or heavy weight *Agribon* works best). For those varieties that set fruit near the top of the bush some kind of shading is necessary here. Hot peppers are less susceptible to blossom-end rot and generally don't sun scald.

Diseases Peppers like tomatoes are effected by *curly top virus*, so use row covers or skirts when plants are young and susceptible. Peppers are also affected by several other diseases throughout their life cycle. For references to other disease problems, I recommend reading the NMSU Extension publication on [Chile Pepper Diseases](#) for additional information. No one says it better than Ms. Goldberg.

Growing your own backyard peppers can be done easily and dependably with basic knowledge about peppers through their life cycle followed up with diligent gardening. ■

Further Reading

[Chile Pepper Diseases](#)

[Chile Pepper Disorders Caused by Environmental Stress](#)

[Chile Pepper Institute - Chile Information](#) (most of what you need to know)

[Growing Peppers in New Mexico Gardens](#)

[Vegetable Varieties Recommendations for NM Backyard and Market Gardens](#)

[Verticillium Wilt in Chili Peppers](#)

NMSU Extension @ Link: http://aces.nmsu.edu/pubs/_h/H-249.pdf

NMSU Extension @ Link: http://aces.nmsu.edu/pubs/_h/H-249.pdf

NMSU Extension @ Link: http://www.chilepepperinstitute.org/chile_information.php

NMSU Extension @ Link: http://aces.nmsu.edu/pubs/_h/H240/

NMSU Extension @ Link: http://aces.nmsu.edu/pubs/_circulars/CR572.pdf

NMSU Extension @ Link: http://aces.nmsu.edu/pubs/_h/H-250.pdf

Good Gardening and Good Eating,

Darrol Shillingburg, Doña Ana Extension Master Gardener, May 2017

If you have comments or questions, please feel free to contact me at:
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A Big Brown Bat

Bats In The Desert And The Southwest

Source: <http://www.desertusa.com/animals/bats.html>

Bats are often thought of as flying mice, but they are more closely related to primates, including humans, than they are to mice. Bats are unique among mammals because they fly. As with most other mammals, the bat's body is covered by hair, with the exception of its wings.

Although bats have the same basic arm and hand bones found in humans and most other mammals, the bat's hand and finger bones are very long and slender and there are only 4 digits. The delicate-looking skin between the arms, fingers, body, legs, and feet looks delicate, but is extremely resistant to tearing by sharp objects.

Size can vary greatly among the more than 900 bats species worldwide, ranging from the 0.5-ounce Bumblebee Bat with a 6-inch wingspan to the 3.3-lb Flying Fox with a wingspan of 80 inches.

Geography – Range

Bats are found almost everywhere on earth, except in extremely hot desert environments and the cold Polar Regions.

Vital Stats		Cautions
Weight:	1/2-oz.–3.3lbs.	All resident species of bats in the US are capable of being infected with rabies, but the incidence of rabies is the same as in other mammals. Left alone, bats pose no threat to humans. But most bats will bite when first captured and handled.
Length:		
Wingspan:	6-78"	
Sexual Maturity:	6-12 mos.	
Mating Season:	Year round	Never handle a bat that appears unable to fly.
Gestation Period:	60-240 days	
No. of Young:	1-2	Never use your hands to pick up a bat found on the ground.
Birth Interval:	1 year	
Lifespan:	4-32 years in the wild	Before entering a bat-roosting site to study specimens, contact the Board of Health and inquire about local rabies conditions.
Typical diet:	Insects	

Comparisons

- The more than 900 species of bats worldwide belong to the taxonomic Order *Chiroptera*. The United States is known to have 15 genera, totaling 44 species of bats.
- Bats are unique in the animal kingdom because they are the only mammals to have evolved true flight. Most species also possess a system of acoustic orientation, often called "bat radar," but technically known as *echolocation*.

Related Species

There are numerous species of bats throughout North America. Those that inhabit the southwestern deserts comprise 11 genera and more than 18 species. The more wide-ranging ones include:

- **Big Free-tailed Bat (*Tadarida macrotis*)**
Extreme southern Sonoran and Chihuahuan deserts. Free-tailed bats also known as Mastiff Bats, or Bulldog Bats because of their facial resemblance to dogs comprise about 90 species of bats in the family *Molossidae*. Most species live in groups.
- **Brazilian Free-tailed Bat (*Tadarida brasiliensis*)** is by far the most common bat occurs throughout the southern US including all four Southwestern deserts. A US population of more than 100 million also makes it one of the most numerous of all mammals. Most individuals from this region migrate to Mexico for the winter, usually toward the end of October, and return in March to mate.
- **California Leaf-nosed Bat (*Marcotus californicus*)**
Sonoran and Mojave deserts.
- **California Myotis (*Myotis californicus*)**
Throughout all four deserts of the American Southwest and along the Pacific coast.
- **Cave Myotis (*Myotis velifer*)**
Sonoran and Chihuahuan deserts, excluding California.
- **Ghost-faced Bat (*Mormoops megalophylla*)**
Extreme southern Sonoran and Chihuahuan deserts.
- **Long-tongued Bat (*Choeronycteris mexicana*)**
Extreme southern Sonoran Desert.
- **Mexican-Free-tailed Bat (*Tadarida brasiliensis mexicana*)**
Chihuahuan Desert. A subspecies of the Brazilian Free-tailed Bat, forms colonies of several million individuals.

Females migrate from Central Mexico to Texas and adjacent states each spring, returning south in the fall. Carlsbad Caverns in New Mexico was discovered as a result of the Mexican Free-tailed Bat's emergence. Here, in five large caves, they form summer nursery colonies, where they produce about 100 million young. While females occupy the nurseries, their daily flights to and from the caverns is a major feature of this national park.



A very rare Spotted Bat who was found in Escondido, Ca. rehabbed and released.

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Bats –Continued From Page 22

- **Mexican Long-nosed Bat** (*Leptonycteris nivalis*)
Chihuahuan Desert of southwestern Texas.
- **Pallid Bat** (*Antrozous pallidus*)
Throughout all four deserts of the American Southwest.
- **Pocketed Free-tailed Bat** (*Tadarida femorosacca*)
Extreme southern Sonoran Desert
- **Sanborn's Long-nosed Bat** (*Leptonycteris sanborni*)
Sonoran Desert of southeastern Arizona.
- **Silver-haired Bat** (*Lasionycteris noctivagans*)
Great Basin Desert and across the northern US.
- **Southwestern Myotis** (*Myotis auriculus*)
Extreme southern Sonoran and Chihuahuan deserts.
- **Spotted Bat** (*Euderma maculatum*)
Ranges throughout all four deserts of the American Southwest. One of the largest North American bats, this species is also called the Death's Head Bat.



A rare Western Mastiff Bat, the largest bat in the US. She was rehabbed and released.

- **Townsend's Big-eared Bat** (*Plecotus townsendi*)
Throughout all four deserts of the American Southwest and along the Pacific coast.
- **Vampire Bats - 3 species of blood-eating bats, family *Desmodontidae***, native to the New World tropics, occurring in the Chihuahuan Desert of northern Mexico. Vampire bats feed on any quietly resting warm-blooded animal. They make a small cut with their sharp incisor teeth, often without disturbing their prey, and lap the blood that flows from the incision.
The 3 species are the Common (*Desmodus rotundus*), White-winged (*Diaemus youngi*) and Hairy-legged (*Diphylla ecaudata*)
- **Western Mastiff Bat** (*Eumops perotis*)
Sonoran and Chihuahuan deserts.
- **Western Pipisrelle** (*Pipistrellus hesperus*)
Throughout all four deserts of the American Southwest.
- **Yuma Myotis** (*Myotis yumanensis*)
Throughout all four deserts of the American Southwest.

Vocalization As bats fly, they issue a continuous stream of high-pitched sounds at the rate of about 30 per second. The frequency of these sounds starts at approximately 30,000 cycles, the extreme upper limit of human hearing, and ranges upward to 60,000 cycles.

The squeaking of a roosting bat is at a much lower frequency and easily discernible to the human ear. If a bat picks up an echo from one of its sounds, it instantly speeds up the rate of discharge until the signals are coming at 50-60 per second.

The pattern formed by the echoes tells the bat of obstacles, their size, shape, and location. Bats can thus easily locate their prey, night-flying insects, as well. This is referred to as *echolocation*.

Wings Bat "wings" are really leathery membranes stretched between the extremely elongated four "fingers" of their front feet, extending back to the outer portion of their hind legs. Another membrane extends from the inside of the hind legs to the tail, leaving the hind feet free for gripping as the bat hangs upside down in its roost.

Eyes Although the bat is not blind, its eyes are best adapted to seeing in the dark, and they see in only black-and-white.

Ears Bats have greatly enlarged ears, necessary for night flying, which they keep meticulously clean with their sharp thumbs.

Feet The thumbs of the forefoot are small, equipped with sharp claws and not connected to the membrane.

Behavior

Bats are very shy creatures and like most wild animals, avoid contact with humans while going about their business of eating, reproducing and avoiding predators. Bats vary greatly in their habits, depending on their species. Some fly in daylight, others at dusk or dawn, and still others only in the dark of night. Some are found exclusively in remote caves, others in remote caves or behind the shutters of your house. Some hibernate while others migrate long distances.

The flight of bats is not direct but undulating, somewhat like stone skipping across a pond. As it hunts, the bat is virtually unmolested. Occasionally, one may fall prey to an owl, or a sudden storm might claim some victims, but, for the most part, the life of the bat is quite uneventful.

Although their general appearance would seem to deny it, bats are clean. When a bat returns to its roost for its upside-down sleep, it will spend as much as 30 minutes cleaning itself before settling down to sleep. Wherever it can reach with its long, pink tongue will be thoroughly bathed. Often, moistened hind feet with their fingers free of the membrane will tend to the rest of the body.

When winter comes, insects are no longer available and weather extremes make flying hazardous. The bat, having at least doubled its weight since spring, will either hibernate or migrate. Some bat migrations are known to cover as much as 1,000 miles. By late fall, one way or another, the bat has accumulated a layer of fat that will sustain it either through a winter's sleep or a marathon migration flight.

Article Continues on Page 24

Bats—Continued From Page 23

Mexican Free-tailed Bats, learning to fly. They were released.

Habitat Some species of bats prefer to live alone in trees. Other species live in groups called colonies and are likely to inhabit caves. Tropical bats make homes everywhere from banana leaves to spider webs.

Food & Hunting Nearly all bats that live in the US feed on insects. As it flits about, the bat gathers insects in its open mouth or in its tail membrane, which it controls like a scoop. In the course of one night's hunting a bat may consume more than half its own body weight in insects. Bats consume many hundreds of thousands of tons of insects each year.

As it flies across open water, the bat swoops low and dredges up water in its dangling lower jaw. It may make several passes over a pond or rain puddle to reduce its thirst.

Breeding Mating may occur two or even three times a year; in late fall, just before hibernation, in midwinter if the roost is warm enough, and again in spring.

The birth, however, following a delayed fertilization where the sperm is held dormant within the female, takes place in the spring or summer after an actual gestation period of 50 to 60 days. While some births occur in May, June and July see the arrival of most baby bats.

When she is about to give birth, the female moves off to an area within the roost and changes her position so that she is hanging head-up by her thumbs rather than head-down. As the infant emerges, the female cups her tail membrane to catch it. She then licks it to help it free its wings and legs, which are stuck to its body.

The young bat may weigh one-fifth as much as its mother. Its eyes are closed for the first day only, and it is quite naked for the first several days. Within a week after its birth the baby bat is carried on the nightly hunts by the female; it grasps her fur and feeds at one of her two nipples.

In two or three weeks it is weaned and then may be fed on regurgitated food brought home by the mother, after it becomes too heavy. By the third or fourth week, it is hunting on its own and is only 5 weeks away from full growth. Females mate at the end of their first summer, males at the end of their second. In some species, multiple births occur up to four.

A bat may live from 10 to 20 years, depending on species and circumstances. Accidents claim some, cave temperatures that drop below freezing take those that don't move in time, but bats are more likely to live out their full life potential than most small mammals.



Conservation Bats have many natural enemies and large numbers of them die while still young. Some of the hazards include Great Horned Owls, some species of hawks, Peregrine falcons, raccoons, house cats, and snakes. Bats can be caught on barbed-wire fences, fall from a roost, or die if their cave is flooded.

The most significant causes of premature bat death, however, are the activities of people. Bats are in serious decline nearly everywhere. Forty percent of the bats in the US and Canada are endangered or candidates for such status. Even small disturbances in their habitat can seriously threaten their survival. Use of insecticides in agriculture is responsible for killing bats in great numbers. When bats consume the chemical-laden insects, the bats become poisoned and die.

Bat droppings (guano) support entire ecosystems of unique organisms, including bacteria useful in detoxifying wastes, improving detergents and producing gasohol and antibiotics. ■





Ferruginous Hawk

Source: https://www.allaboutbirds.org/guide/Ferruginous_Hawk/id

Found in prairies, deserts, and open range of the West, the regal Ferruginous Hawk hunts from a lone tree, rock outcrop, or from high in the sky. This largest of North American hawks really is regal—its species name is *regalis*—with a unique gray head, rich, rusty (*ferruginous*) shoulders and legs, and gleaming white underparts. A rarer dark-morph is reddish-chocolate in color.

Ferruginous Hawks eat a diet of small mammals, sometimes standing above prairie dog or ground squirrel burrows to wait for prey to emerge.

Size & Shape

Ferruginous Hawks are large Buteo hawks with relatively long wings and large heads. The wings narrow to form more pointed tips than is typical for other buteos.

Color Pattern

Light-morph Ferruginous Hawks have strikingly white underparts and rusty legs that form a V when the bird is soaring. They have rusty upperparts with pale heads. Immature light morphs have varying amounts of brown spotting on the belly and legs. Rarer dark-morph individuals are mostly a deep rufous-chocolate. White bases to the primary feathers form white panels in the outer wing.

Behavior

Ferruginous Hawks soar with their wings held slightly raised but with the wingtips held almost flat. They also turn into the wind and hover or kite in place as they hunt. They often hunt on the ground as well.

Habitat

Ferruginous Hawks live in the open spaces of the West, in grasslands, prairie, sagebrush steppe, scrubland, and pinyon-juniper woodland edges.

Ferruginous Hawks are open-country birds that breed in grasslands, sagebrush country, saltbush-greasewood shrublands, and edges of pinyon-juniper forests at low to moderate elevations. Their breeding habitat includes features such as cliffs, outcrops, and tree groves for nesting.

West of the Rockies, Ferruginous Hawks spend the winter in grasslands or deserts with abundant rabbits, pocket gophers, or prairie dogs. East of the Rockies they live mostly in grasslands, especially those with abundant prairie dogs.

Food

Ferruginous Hawks have a limited diet of small mammals: rabbits, hares, ground squirrels, prairie dogs, and pocket gophers. West of the continental divide their main prey items are jackrabbits and cottontail rabbits; east of the divide they eat mostly ground squirrels and prairie dogs. Their diet occasionally includes amphibians, reptiles, insects, and birds.

They hunt at any time of day using four methods: standing on the ground and striking, detecting prey from a nearby perch, searching on the wing, and (in strong wind) hovering or kiting in place. They sometimes walk, hop, and run on the ground after their prey. On communal feeding grounds in winter, they flush competitors away from their prey by hopping with outstretched wings.



Nest Description

The pair builds the nest (or refurbishes an old one) together, with the male bringing most of the materials and the female doing most of the construction.

Nest materials include sticks, twigs, old sagebrush stems, plastic and metal debris, and sometimes bones.

The nest often measures more than 3 feet high X 3 feet across and may be lined with cow dung, sod, and bark that the female strips from trees. The pair usually completes it in less than a week. If interrupted, they may abandon site and choose a new one.

Nesting Facts

Clutch Size	1–8 eggs
Number of Broods	1 brood
Egg Length	2.3–2.5 in.
Egg Width	1.8–2 in.
Incubation Period	32–33 days
Nesting Period	38–50 days
Egg Description	Creamy white with buff or brown blotches.
Condition at Hatching	Helpless, with eyes closed, and covered in down.



Nest Placement

The male and female jointly choose a nest site in a lone tree, cliff, utility structure, outcrop, boulder, shrub, knoll, or haystack. Nest height varies considerably, from more than 65 feet high all the way down to ground level. Ground nests are almost always on slopes or hillcrests. Elevated nests are built on remains of other species' nests.

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Ferruginous Hawk –Continued From Page 25**Behavior**

Ferruginous Hawks are usually found alone or in pairs, but in winter they may hunt just a few feet apart from each other and roost in groups of 6–12. They roost on cliffs, haystacks, utility structures, trees, or the ground. They seem to be monogamous (although three adults are sometimes seen at nests) and some may keep their pair bond all year round.

Courting pairs soar in wide circles and the male “sky dances” by repeatedly diving and ascending. The pair may then grasp beaks and talons and spiral toward the ground.

Ferruginous Hawks often nest in habitat shared by Swainson’s Hawks and Red-tailed Hawks. They are somewhat aggressive during breeding season, chasing and attacking intruders with open talons. Songbirds such as Western Kingbirds nest in the same trees and sometimes attack the hawks, which nevertheless ignore the smaller birds’ young.

Migration

Short- to medium-distance migrant. Some southern-breeding populations may be sedentary. Migrants generally take routes that do not involve crossing the Rockies. Alberta-to-Texas migrants first move southeast and then south, following grasslands.

Conservation

Ferruginous Hawk numbers were stable or slightly increased between 1966 and 2015, according to the North American Breeding Bird Survey. Partners in Flight estimates a global breeding population of 80,000, with 85% spending some part of the year in the U.S., 15% breeding in Canada, and 29% wintering in Mexico. The species rates a 10 out of 20 on the Conservation Concern Score.



Ferruginous Hawk is not on the 2016 State of North America’s Birds’ Watch List. Hunting pressure declined in the twentieth century after the Migratory Bird Treaty Act made it illegal to hunt most species of wild birds. Changes to nesting habitat including agriculture, grazing, small mammal control, mining, and fire may contribute to regional population declines.

Ranching, if practiced sustainably (particularly with respect to conserving prairie-dog towns), may be an effective means of conserving Ferruginous Hawk habitat. Other proposed management includes maintaining prey populations and mitigating mining, pipeline construction, and urbanization. In formerly occupied areas where trees are no longer available for nesting, artificial nest platforms help boost populations.

**COOL FACTS**

- In winter, groups of 5–10 Ferruginous Hawks congregate in prairie dog towns, striking prey when it emerges. They threaten each other by hopping and flapping their wings, creating a feeding frenzy that may attract more Ferruginous Hawks, along with Golden and Bald Eagles.
- When bison still roamed the west, Ferruginous Hawk nests contained bison bones and hair along with sticks and twigs.
- The bulky sticks of their nests are not easily woven together for tree nesting, so they often build on the remains of pre-existing hawk or crow nests. Conservation managers can take advantage of this, providing artificial nests to help boost populations.
- Ferruginous Hawks and Rough-legged Hawks (plus the Golden Eagle) are the only American hawks to have feathered legs all the way down to their toes.
- Ferruginous means rust-colored, and refers to the reddish back and legs of light-morph birds (which are more common than dark morphs).
- Rivaling the massive Ferruginous Hawk in size is the Upland Buzzard of central Asia, which may be a close relative from the days of the Alaska-Siberia land bridge. Ferruginous Hawk fossils are found across the west and date back to the late Pleistocene.
- The oldest Ferruginous Hawk on record was at least 23 years, 8 months old when it was found in Nevada in 2006. It had been banded in the same state in 1982. ■





PAPER WASP

These industrious, insect-hunting wasps keep to themselves unless they're bothered.

Bill Johnson | Horticulture Magazine | Jan/Feb, 2017

Most likely, almost every gardener has had an encounter with a Paper Wasp. A social species of insect, they live and work in groups, creating open-faced honeycomb-like nests made out of paper pulp. These downward-hanging nests are often constructed under a home's eaves. They contain many octagonal cells in which the wasps lay their eggs; later they fill the cells with food for the emerging larvae.

Paper Wasps are one of the more docile species of wasps. Not much will upset them, save for deliberate bothering. Like most wasps they prey on various other insects, which they provide to their larvae. The adult Paper Wasp prefers flower nectar and other plant secretions as its main food source.

You may not want to view one up close and head-on, but if you do, note that the female face is triangular while the male face is square. He possesses long, curl-tipped antennae, while her shorter antennae stand mostly straight. The male abdomen ends bluntly, but the female abdomen comes to a point.

Paper Wasps fall in the genus *Polistes*, part of the Family *Vespidae* in the order *Hymenoptera*. Close to 25 species can be found from northern Mexico throughout the United States and into Canada. Here are three of the more common species.

***Polistes fuscatus* (Northern Paper Wasp)** It is very common throughout the U.S. and Canada east of the Rocky Mountains. Its abdominal color pattern varies ranging from lighter versions to dark version along with the yellow abdominal circle. In the female, the entire body is almost black.

***Polistes dominula* (European Paper Wasp)** is seen throughout the U.S. and Canada. An imported species from Europe, it's sometimes considered invasive, as it tends to take over the territories of native species. It's also commonly mistaken for a 'yellow jacket', thanks to the banding patterns on its abdomen.

***Polistes flavus* (Yellow or Golden Paper Wasp)** resides in the desert Southwest. In my view, it associated itself sometimes with plants of a similar color, almost using them as a camouflage. Because its main food is caterpillars, it is regarded as a beneficial insect. ■



GROUND WASPS/YELLOW JACKETS

These picnic pests provide some benefits to the garden

Bill Johnson | Horticulture Magazine | Nov./Dec., 2016

Yellow Jackets, or ground wasps, can be a real nuisance at the end-of summer family picnic, but I think they get a bit of a bad rap. They are natural predators of caterpillars, grubs, grasshoppers and flies, all of which they feed to their larvae.

Adults find their own sustenance in nectar, and while they're at it they pollinate flowers (though not to the extent that bees do, since they do not have pollen sacks). They take honeydew from aphid colonies; the presence of Yellow Jackets around trees and plants in late summer may tip you off to an aphid infestation.

Some people mistakenly refer to Yellow Jackets as bees, but they're ground-nesting wasps. Unlike a lot of ground-nesting solitary bees, these wasps form colonies underground that can sometimes contain several thousand individuals. The workers and the males do not survive winter, but a new queen does. She emerges in spring to start a new underground home.

When I was in high school, I wanted to see just how big a Yellow Jacket nest was. Late one fall, after the killing frosts had come, I decided to dig one up. To my surprise, it was a little bigger than a football and comparable to large bald-faced hornet nests that are seen hanging in trees. It contained layers of combs and quite a few dead wasps. I brought all of this into my folks' basement and proceeded to pick through the debris. Suddenly I heard bussing. I quickly realized that they were not dead yet—a few hundred Yellow Jackets were beginning to come to life in the warm basement. Well, they went back outside very quickly. The moral of this story: don't do that at home. You also don't want to disturb a colony by running over the nest entrance with a lawn mower. I've done that too, and they become a bit testy.

Ground Wasps are found in the family *Vespidae*, the sub-family *Vespinae* and the genus *Vespula*. Three of the more common species found in the United States are:

Eastern Yellow Jacket (*V. maculifrons*) is found in the Eastern half of the country from Canada to Texas.

Southern Yellow Jacket (*V. squamosa*) is found from Michigan to Texas to Florida.

Black Jacket (*V. consobrina*) ranges across the northern states into Canada.

Southern Yellow Jacket queens can be parasitic, taking over colonies of the Eastern species. The Black Jacket can sometimes be confused with a bald-faced hornet, as they're both black with white strips. ■

HEALING HERBS & PLANTS



COMFREY

(*Symphytum officinale*)

Source: [12 Healing Herbs You Need To Grow in Your Medicinal Garden Sierra Bright | Natural Living Ideas.com | November 20, 2015](#)

This is another vigorously growing herbaceous plant that has a weed status today in most places. However, the roots and leaves of Comfrey are traditionally used to treat ligament injuries and broken bones, earning it common names like boneset and knit bone. Other uses of the leaf and root poultice include relief from arthritic pain and varicose vein ulcers.

Although Comfrey extract has a history of being used internally to treat excess menstrual flow, gastrointestinal problems and stomach ulcers, only topical application is recommended today. The *allantoin* in the plant can aid tissue repair and regeneration. Gargling with an infusion of Comfrey leaves helps relieve sore throat and gum disease. ■



Note: All herbs should be used with caution because they contain powerful bioactive compounds. Start with small quantities initially to test your tolerance. Watch out for allergic reactions. People who have ragweed allergy may have similar reactions to medicinal plants belonging to that family.

When you feel good with a recommended amount of a given herb, it doesn't necessarily mean that you will feel better with larger quantities or a stronger brew. To derive maximum benefit out of the herbs you grow, try to learn as much about them as you can.



SCORPIONWEED

(a.k.a *Blue Phacelia*, *Wild Heliotrope*)

Source: Desert USA @ link: <http://www.desertusa.com/flowers/Blue-Phacelia-Wild-Heliotrope-Scorpionweed.html>

- Color:** Violet Blue to Purple, Whitish
- Common Name:** Blue Phacelia, Wild Heliotrope, Scorpionweed
- Latin Name:** *Phacelia distans*
- Range:** Sonoran and Mojave deserts of southeastern California to southwestern Utah and south to Arizona and northwestern Mexico.
- Habitat:** Desert, washes, slopes and roadsides between 1,000 and 4,000 feet.
- Flowers:** Bell-shaped, pale blue flowers with 5 rounded, united petals, bloom February through June. Flowers are about 1/4 inch wide, in finely haired, terminal coils.

Description: Scorpionweed is an annual shrub of the Waterleaf Family (*Hydrophyllaceae*). It often grows up through other shrubs to a height of from one to 3 feet. Green, finely-haired, fern-like leaves and the coiled, scorpion tail arrangement of the flowers (see below) are characteristic of this species.

The more than 100 species of *Phacelias* in the western US are difficult to distinguish one from another except by seed identification. But the pale blue flowers and weak, straggling stems of the *Phacelia distans* distinguish it from other desert *Phacelias*.

This species is known by another of other common names, including Wild Heliotrope and Scorpionweed. ■



Continued From Page 15



How to Make Mulch: High-Speed Blender Instructions

- Put your corks into your blender with the lid on. You're going to blend about 12 corks at once. More than that, and you'll end up with a superfine cork sand at the bottom and lots of whole corks at the top. Don't use that tamping-down tool, because cork is going to fly all over your kitchen if you do that. I can tell you how I figured that out while I wipe the cork dust off of the walls.
- Start your blender on the lowest variable speed, then quickly turn it up to the highest. Switch to high speed, and blend for 10-15 seconds.
- Dump your blended cork into a bowl, fish out any big pieces, and repeat until everything is blended.
- Mulch those plants! That's it. Once you've blended up the mulch amount that you need, spread it in a layer over your plant. ■



—U.S.D.A. INVASIVE / WEEDY PLANTS—

**CHICORY***Cichorium intybus* L. (Aster Family)**Source: USDA Invasive Plants and Weeds of the National Forests and Grasslands in the Southwest Region, Second Edition**

- Description** Chicory is a deeply rooted erect, branching, biennial or perennial, warm-season forb, from 1 to 6 feet tall with milky sap. Basal rosette of leaves arise from a long fleshy taproot. Stem color is green or reddish.
- Origin** Native to southern and central Europe and western Asia; chicory has beautiful flowers and a very attractive growth habit; however, it is a good example of a non-native species that remains sparsely scattered during early population establishment and then within a few years can show up in masses far and wide; New Mexico Class H noxious weed.
- Habitat** Waste places and disturbed sites, especially along roadsides typically within elevations that generally range from 4,000 to 8,000 feet.
- Leaves** Basal leaves in rosette; basal and cauline leaves are alternate, clasping, and hairy, 2 to 10 inches long and ½ to 23/4 inches wide; basal leaves spatulate in outline, irregularly saw toothed or pinnately incised, with the lobes or teeth hooked backward; stem leaves become reduced, sessile, entire to toothed,
- Flowers** Flowers June to August; blue, rarely white or pink, flower heads are relatively large, 1 to 19/16 inches in diameter, borne in widely spaced sessile clusters (1 to 3) along the branches or at the apex of short branches; ray flowers are blunt and 5 toothed at the apex. Involucre 3/8 to 5/8 inches high, the bracts in two series, the outer about half as long as the inner; pappus of narrow, minute scales.
- Fruit** Achenes weakly 5-angled, 1/16 to 1/8 inch long, tipped with a crown of minute scales.
- Propagation** Reproduces by seed; can produce as many as 425,000 seeds per pound. Do not allow seeds to germinate!
- Problem** A New Mexico Class H noxious weed; *Cichorium intybus* has been declared an invasive species in several states.

NON-CHEMICAL CONTROL

- If plants are established, the flower heads can be cut and destroyed before they can spread the seeds.
- Water and fertilizer can improve soil conditions encouraging the growth of grasses.
- Digging is a successful control for Chicory, but mowing is not effective.

CHEMICAL CONTROLTreatment with 2,4-D and *dicamba* when the plant is very young have proven useful. ■

MASTER GARDENER MONTHLY MEETING

Date: April 12, 2017 ♦ Notetaker: Rachel Gioannini, Certified MG

Intro & Welcome: Jeff announced that there would be no Picacho Art in the Garden Tour this year as not enough artists volunteered. Winifred Jahnke reported that Juliet had nine falls and is staying home to recover. She has a concussion and needs to stay home and quiet. Meeting called to order at 9:17am by Jeff Anderson. Jeff conducted a Landscape Workshop two weeks ago and County staff attended. Jeff thinks he may do a turfgrass workshop in May.

Committee/Project Reports

- **MG Hotline:** Information sheets for calls at the Hotline are not being filled out correctly and completely. Please! If you don't know how, ask for guidance. Ann pointed out a booklet that helps you to fill out those forms is available in the Hotline Office.
David and Gail Ross introduced new interns, Richard Courtney, who lives in T or C and Rick Diaz, a Las Cruces native who has already survived two shifts on the Hotline. David read an email from Eric Graham who created and keeps up our MG computer system, like logging hours and passwords. His email is eric@diralg.com; contact him if you have forgotten your password or need help. You will need both your username and password to log hours and sign up for the hotline, etc. Need Certified MG's to sign up for May hotline shifts!!!
- **MG Magazine:** Iris will be the plant of the month. Tropical: Tropical Hibiscus (different from Hardy Hibiscus). Waterwise plant: allium. Other articles: Ten plants for balms and ointments, 14 plants to feed your pets, using corks for your plants, 8 ways to use cardboard in your garden. Healing Herb: Comfrey. Book: 200 succulents. App: food gardening guide. Bird: Ferruginous Hawk. Bats in the desert and the southwest. Insects: ground and paper wasp. Invasive plant: Chicory. Feel free to send suggestions, websites and book reviews to Ann for the magazine.
- **Community Gardens:** Art Banach and Jerry Humboldt have the gardens almost planted. Meetings are at 10am, third Wednesday of the month at Munson Center. They may have a tour next week.
- **Correctional Facility** Jeff is working with the correctional facility to establish a garden at the prison. Getting things into the prison is very challenging. Jeff has been nominated for an Ag Leadership Class that has a two-year commitment but overlaps with training for the prison.
- **Luna County MGs:** Ann reported that their 12-week workshop was well-received last year and graduating students are now working on their Hotline. MG workshops starting will be starting on August 17th from 5:30-7pm on Thursday nights for a \$50 fee. Main Street Project has put in a new fountain and Ann is working with them on a planting bed plan for that public area.
- **Las Cruces Water Festival, April 13, 2017:** Volunteer sign up went around. Jeff will be there and set up starts at 7:30am, doing erosion demonstration for the 4th graders. 8am at Young Park. Check in at information booth. Bring your own chair.
- **MG Tour of Gardens:** Master Gardener Tour of Gardens was last Saturday and had about 15 people. Was great fun and they really enjoyed it.
- **Kids, Kows & More:** Kids, Kows and More, April 26 & 27, 8am-1:30pm. 3-4 volunteers needed, lunch included. At the Farm and Ranch Museum. Sign-up sheet going around.
- **4H Horticulture County Contest** May 30 at Skeen Hall—need 6 volunteers to proctor. Districts June 21 & 22 in Socorro. State Contest July 11, here—need 6 volunteers. Need volunteer 4H horticulture teacher. Will take place sometime before the 30th. Winifred volunteers to teach this and will talk with Eva to coordinate this.
- **Hydroponics in the Las Cruces Classroom** grant was approved! 3 schools will participate. Don't know which schools yet. Jeff wants to do a hydroponics class at the office June 1 to train folks about the system. If you're already familiar and can help get things going, contact Jeff or Dot.
- **Other:**
... Joan Woodward reported on work at the Bosque restoration project.
... Alberta suggested DesertUSA.com is a great website for wildflowers in the desert.
... Sutherlands does not have the arctic frost orange back in stock, but does have Texas Ash, Mexican Sycamore, Chinese Fringe Tree and Redbud 'Merlot'.

Educational Presentation:

John White, curator for Chihuahuan Desert Botanical Gardens discussed the upcoming Plant Sale, April 29 & 30, 9am to 4pm. Big sale of native and adapted plants with proceeds to support the garden. Needs lots of volunteers! Unload Thursday and Friday, April 27 and 28. You get a 10% discount when you volunteer. Can also call to volunteer at 915-747-5565 or 915-747-8994. Meeting adjourned at 10:42am.

Next Meeting: Wednesday, May 10, 2017, Roadrunner Room, Branigan Library.

Time: 9:15 to 11:30am

MASTER GARDENER HOTLINE DUTY



IMPORTANT: Please remember to be present on your assigned date for the Hotline. If another MG volunteer forgets, please give him or her a “reminder” call. Be sure to get a copy of the Subs List, for your information.

UPDATE: As of Tuesday, December 20, 2016, the Hotline will now operate in its new office located at 1170 Solano, Suite M, Room 1833. The Hotline will still be open to the public on Tuesdays and Fridays, from 9:00am through 12:00 noon. For your information, the Extension Office is closed daily from 12 noon to 1:00pm for staff lunches.

URGENT: We need a maximum of only 2 volunteers on each Hotline Day, as there is not enough space for additional people in the new Hotline Office located in Room 1833.

Please consider volunteering for at least one, four-hour assignment to ensure we have adequate coverage for our Hotline during the year.

Thank you for your help.

As of September 11, 2013, per MG request, Hotline duty signups will no longer be listed in this Magazine. As of 1/8/14, we now can sign up for Hotline Duty online at the same website location where we now record our Volunteer Service hours.

Connect to link: <http://aces.nmsu.edu/county/donaana/mastergardener/> and click on Volunteer Hours Logging and you can click on either:

“Go to my log sheets” or “Go to my Calendar”

LUNA COUNTY MASTER GARDENER HOTLINES

Deming (At Extension Office)	Thursdays 9:00-11:00am	(575) 546-8806 Opened March 2, 2017
Columbus (At Library)	Mondays 10:30-11:30am	(575) 531-2612 Discontinued



Link: <http://aces.nmsu.edu/ces/plantclinic/index.html>

The **Plant Diagnostic Clinic** is designed to provide plant diagnostic services for the State of New Mexico. Its services include analysis of plant material for plant pathogens and environmental stresses as well as suggesting appropriate control measures when available.

The Clinic also facilitates insect and weed identification through referrals to other specialists. Its clients include extension personnel, crop consultants, growers, retailers, landscape professionals, golf courses, researchers, government agencies, and homeowners.

The Plant Diagnostic Clinic works very closely with the New Mexico Cooperative Extension County offices. For initial assistance with plant problems first contact the County Extension office near you. The County Extension staff will assist you with sample submission to the clinic if needed. No diagnostic service fees will be applied to samples submitted through Extension offices.

Doña Ana County Cooperative Extension Office (575) 525-6649
Luna County Cooperative Extension Office (575) 546-8806