



University of California Cooperative Extension



Backyard Gardener

INYO AND MONO COUNTIES

SUMMER 2012

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So, You Wanna Be a Farmer?

By Jan Rhoades, UCCE Inyo & Mono Counties
Master Gardener

Have you ever had a bumper crop of, say, kale? Last summer, that happened to me. I was giving it away to anyone who didn't hide when they saw me coming! A happier idea would have been to find some kale customers at the Bishop Farmer's Market. I have a million (well, maybe twenty) good recipes for this wonderful green veggie, and that knowledge alone would have sold my bumper crop in minutes!

But, how to turn this pipe-dream into reality? Fortunately, the Eastern Sierra Certified Farmers Market (ESCFM) is open to backyard gardeners and farmers who would like to sell homegrown fruits, veggies, eggs, cut flowers and herbs, dried flowers and herbs, or honey. (Meat products are in another, more restricted category, as well as jams and salsa, which require Health Department Certification and specialized permits.) The process to become a Certified Producer is straightforward and involves having your garden 'certified', filling out a one-page form, registering as a member of the ESCFM, and setting up shop at the Bishop and/or Mammoth markets.

Don't let the term "certified" scare you. It just means that someone from the county Agriculture Commissioner's office comes out to where you grow your produce to make sure that you are actually growing what you sell (and not buying it from the supermarket!). You then fill out a Producer's Certificate and pay a small fee. It is easiest to sell your items by piece or by the bag, but if you wish to sell by weight, your scale must be certified by the County Weights & Measures Department; see http://ucanr.org/sites/mginyomono/Resources/How_to_Sell_Your_Homegrown_Goods/ for details. The next step is to join the Eastern Sierra Certified Farmers'

Market. For an annual membership fee, growers can sell at the Bishop Farmers Market and/or the Mammoth Lakes Farmers Market (annual fee is \$25 per market). ESCFM has a blanket business license that covers all farmer-vendors at these markets. Joining this group encourages growers to abide by the responsible health and safety practices that are outlined in the California Farmer's Market by-laws and ESCFM by-laws. The final step is to secure your place at the Farmer's Market. Each time you want to sell at the market in Bishop or in Mammoth, you pay a \$5.00 market stall fee, collected at the market.

Smaller growers may join forces and pool their produce to share labor and stall costs. This is an option for community gardens as well. Growers can also sign up to accept WIC coupons that are issued to families in the Women Infants Children Program.

If interested in becoming a farmer-vendor, contact Dori Cann of the Eastern Sierra Certified Farmers' Market. She encourages backyard farmers to sign up, as there is a need for additional growers at the local markets. Dori notes that growers probably do not make a lot of money and that most participate for the camaraderie with other growers, as well as a commitment to their loyal customers. The ESCFM hopes that growers will be regulars at the markets so that locals who frequent the market will become regulars at their stall. It's that direct, personal contact with the folks who are buying local produce that makes the farmer's market so special and fun. Dori welcomes phone calls from interested growers: 760-938-9105.

Garden Tip by Master Gardener Paula Sayer:

- ♣ Don't know if it's a weed or a windflower? Look it up before you dig it up at http://www.ipm.ucdavis.edu/PMG/weeds_intro.html

Full Sun or Part Shade: How These Terms Relate to Desert Areas

By Alison Collin, UCCE Inyo & Mono Counties
Master Gardener

Clutching our precious new plant, we dutifully read the label and wander around our gardens trying to find the perfect spot for it. But wait! Does full sun refer to Death Valley, Mammoth, or the Pacific Northwest? There is a lot of difference in the sun's rays between these locations. When I first moved to California, I thought that succulents would be the answer to drought and heat and, unaware that not all succulents are created equal, planted a patch of Sempervivams (House leeks) labeled "full sun", only to have every one of them die on the first really hot day! While one can use floating row covers in the vegetable garden, having bits and pieces of shade fabric draped about the rest of the garden is hardly aesthetically pleasing.

Technically, *Full Sun* implies that the plant needs at least 6 hours of direct sunshine per day to thrive. If it receives less than 6 hours, it tends to become drawn and floppy and often fails to flower. *Part Sun* and *Part Shade* designations are for plants that do well with 3 to 6 hours of sun. For *Part Shade* plants, sun exposure is closer to 3 hours and ideally during the morning. Some plants may be able to tolerate more sun if ample water is available to help them through the hotter hours.

Shade-loving plants require about 3 hours of sun per day, preferably in the morning when the sun's rays are not too intense; they often suffer from sun scorch if exposed to direct rays. Alternately they may thrive under a leafy deciduous tree which provides dappled shade for most of the day. No green plants can grow without sunlight, and although there are a very few (such as ferns) that can tolerate minimal sun, these tend to be plants that naturally grow under heavy leaf canopies in rich moist soil, and are not adapted to desert conditions.

The American Horticultural Society publishes a heat zone map that shows the number of days when the temperature reaches over 85 degrees Fahrenheit, the temperature at which most plant cells are damaged. This map can be found at: www.ahs.org/publications/heat_zone_map.htm

In addition to the amount of daily sun, it is important to consider the intensity of heat. Reflected heat from a concrete path or driveway will result in a much higher air temperature than that in an open sunny patch. West-

facing walls that receive afternoon sun are often much hotter than south-facing walls that receive sun from overhead.

When choosing a site for planting, spend a little time studying the pattern of sun and shade during the day. Take into account how this might change during the seasons; what may be in shade in December may be in full sun in June. I once planted a hosta plant under a substantial shade tree, only to have the hosta scorched to death due to the strong rays that shone through a gap in the tree's branches between 1pm and 3pm.

How are we to know which plants can handle full desert sun and which cannot? Choosing native plants is not necessarily the answer, unless you are very familiar with their habitat. There are many plants that grow in full sun on rocky ledges in the Sierra at altitudes above 10,000 feet but which cannot stand the heat of the valley floor even if planted in a similar situation. If possible, study gardens in your neighborhood and observe what does well in particular situations. For example, I am planning to plant beneath a north, slightly west facing wall which has no sun exposure between the equinoxes, but gets some afternoon sun in summer. On my daily walk in the neighborhood, I make a mental note of all those plants that are growing in likewise positions and are doing well. I also note those which are not looking happy!

Ask specialists at the local nursery as to whether a particular plant can handle full sun in your area. At the nursery, observe which plants are protected by lathe and which are in the full sun. Attend garden tours, ask your neighbors and local gardeners what their experiences have been, talk to growers at your local farmer's market, and check out online garden catalogues as some of them make a feature of plants suitable for "an inferno strip". Sunset Western Garden book will often mention if a particular plant requires protection from strong sun. Remember to check cold tolerance too; many plants such as eucalyptus, oleander and lantana are splendid survivors of heat and drought but cannot survive the winters of the high desert. (Lantana is good when grown as an annual). In general, sun-loving, heat-tolerant plants often have gray foliage (Artemesia, Stachys, Perovskia, Salvia), while those with yellow foliage or a lot of white variegation may tend to burn.

Fruit and Vegetables

With adequate water, **fruit trees** in the high desert cope with the sun remarkably well, although trunks and branches exposed to direct sun will suffer serious damage unless painted white (50% strength white latex paint).

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Berries carry the full sun label, and although they survive in full sun in the Owens Valley, in my experience they do better when protected from afternoon sun. One of my neighbors has erected slatted wooden berry trellises and planted an array of **blackberries, logan and tay berries** on the shadier side. These plants are far superior to when they were growing in full sun, where the foliage often burned. While the berries on the sunny side of the trellis are often withered, those receiving dappled shade are of very good, sweet quality. **Blueberries and raspberries** also do better with afternoon shade and an ample supply of water. (Isn't it amazing that one can even consider growing raspberries in the desert)? Although **strawberries** are sweeter when grown with plenty of sunlight, the berries will often cook if exposed to the fiercest sun or will dry and shrivel if they get too hot and lack an adequate water supply.

Many **vegetables** considered sun-lovers (such as peppers and eggplants) in fact perform better with some protection from the sun's hottest rays. According to one Mono County Master Gardener, "The main issue I've had with Full Sun plants are with large pepper plants, poblanos, Anaheims, and especially bell peppers. The plants do OK in full sun as they are growing, but the peppers get very sunburned and stunted. I have seen beautiful peppers from plants grown under a light diffused shade cover by some family and friends. My personal solution for the past couple years has been to grow beans along 2 rows up very tall poles and train them to link together across strings, creating a sort of bean tunnel. I plant my peppers alongside the beans inside the tunnel. I have had wonderful results with this - larger, unburned peppers, and even a higher yield of fruit. Plus, I really enjoy the little shady sanctuary of the bean tunnel. I have also planted the peppers in the same row as my corn, just a few inches to the corn's eastern side. This way they get shade in the hot late afternoon. The medium-sized peppers (i.e. jalapeños and Fresnos) do very well with just a little shade during the hottest part of the summer. The corn is good for this. In my experience, the small and thin peppers - cayennes, serranos, chile de arbol, are just fine in full sun."

While we know that we should strive to grow only plants suited to local conditions, it can be hard to resist the lure to try something new or grow a coveted plant from temperate regions. To grow successfully in desert climates, it pays to do some homework, learn from others, use ingenuity, and take the label directions with a grain of salt.

Beasts Be Gone! Managing Unwanted Garden Guests

By Jan Rhoades, UCCE Inyo & Mono Counties
Master Gardener

Ah yes, fresh dirt mounds all around the yard – the sure sign of unwanted guests in the garden. I'd like to take it personally, seeing as how they are in MY YARD, however, I do see them everywhere, even out in the pastures and fields. Nothing to do but send those critters packing. The only trouble is, which critter made those mounds and what's the best way to make sure they're gone?

The mounds are most likely made by one of four vertebrate pests found in Inyo and Mono Counties: Pocket Gophers, Moles, Voles and California Ground Squirrels. While you will probably see a Ground Squirrel if it is in your yard, those other furry beasts spend most of their time underground, so that mound tells the tale. Figuring out who made the mound is no great trick, as they each make a different type of hole in the ground.

If the mound is fan-shaped and plugged at the lower end of one side, it's a pocket gopher. Volcano-shaped mounds with the plug located in the middle of the mound (if you can see one at all) indicate a mole. Moles also make underground tunnels that show up as trails of raised earth. Voles, small mouse-like critters, make shallow burrows (about two inches across) and leave well-worn trails that lead from the burrow. Ground Squirrels, brownish grey beasties almost a foot long, make large holes, about four inches in diameter and often have several unplugged openings in multiple locations.

Each of these animals does its own particular brand of damage to your garden. Gophers feed on taproots, killing the plant. Gopher burrows divert precious irrigation water. Moles generally feed on worms and insects. While they don't directly harm your plants, their burrows also divert water away from what is being irrigated, and they leave unsightly mounds. Voles like to munch on roots and the herbaceous parts of plants. Ground squirrels are by far the most destructive of all. They eat all kinds of plants, gnaw on plastic sprinklers and drip lines, and girdle young trees. I have seen a ground squirrel decimate an entire bed of lovely marigolds leaving only the stems sticking out of the ground.

So, what is to be done? For all these pests, an ounce of prevention can be worth a pound of cure. Keeping them out of your garden and away from tender roots and shoots in the first place is worth the time and effort.

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Fashioning underground fencing with hardware cloth and putting it in place before planting trees and shrubs will keep the gophers away from their favorite food. Lining raised beds with hardware cloth will keep out gophers and squirrels. See Eastern Sierra Wildlife Care's new publication on gardening with wildlife (listed below) for information on exclusion strategies and scare tactics to deter unwanted garden guests from coming to visit in the first place.

Beyond prevention, each of these pests requires a different approach, many of which result in their demise. For gophers, combining the use of traps and underground barriers made of hardware cloth is the best approach. Toxic baits are available, but can pose threats to wildlife, pets and children. Other widely advertised approaches such as repellents, vibrating stakes, ultrasonic devices and fumigation have been systematically tested, but have not been shown to work as well at the time-honored, and I should add economical, gopher trap. The "killer" method goes like this: Locate the freshest mound, use a probe to find the tunnels which are 6 to 12 inches under the surface (this takes some practice), dig down to the tunnel and insert the trap (which you have set – no bait needed), stake the trap so that the gopher doesn't run away with it. At this point, you can cover the trap hole or leave it uncovered. Check the traps 24 to 48 hours later. With any luck, you should have the varmint.

For moles and voles, toxic bait and trapping also works well. Traps especially made for these critters will have to be purchased, as gopher traps are the wrong size.

Ground squirrels are by far the biggest challenge. They can be trapped. It is best to use a kill trap instead of a live trap, as it is illegal to release squirrels elsewhere without a permit, as they just become someone else's problem. Bait the traps with nuts, oats, barley or melon rinds and place them near the burrows. This approach is most effective in the fall and winter months. Toxic baits are available at some hardware and feed supply stores. They should be used only as the instructions are written and with extreme caution around pets, poultry and wildlife. The bait should be eaten in several feedings over a week-long period to be effective, as it works by making the squirrel bleed to death internally. This approach is most effective in the summer and fall. Fumigation with gas cartridges is best done during the spring, when the soil is moist enough to seal in the gases. These materials are flammable and need to be used with caution, especially in warm weather.

Additional resources on pest management:

UC IPM Pest Notes. Valuable resource for information pertaining to many wildlife pest issues for California. <http://www.ipm.ucdavis.edu/PMG/>

Gardening with Wildlife. Published by Eastern Sierra Wildlife Care, this guide offers tips on building good relations with wild neighbors through humane methods. Info on exclusion and scare strategies, plus behavioral profiles for the most common garden pests. <http://ucanr.org/sites/mginyomono/files/147607.pdf>

UCCE Vertebrate Pest Control Education Videos.

Superb resource for all aspects related to California ground squirrels, pocket gophers and meadow voles. If you're wondering how to set a gopher trap, this video can help. <http://groups.ucanr.org/vpctraining/>

California Department of Pesticide Regulation

Endangered Species Query. Allows the applicator or landowner to determine if any endangered species are found at a location where pesticides are to be used. <http://calpip.cdpr.ca.gov/county.cfm>

The Vertebrate Pest Control Handbook. Contains extensive information on many subjects pertaining to wildlife pests in California, including information on the biology of California birds and mammals, laws and regulations, and the use of toxicants and fumigants for controlling wildlife pests in California. <http://www.vpcrac.org/about/handbook.php>

Cultivating Community in Local Gardens

Community gardens are cropping up all over the Eastern Sierra! The oldest - Lee Vining Community Garden – has been in existence for 15 years, and nearly a dozen others have joined its ranks in the past couple years. The IOU Garden in Lone Pine started in 2009, followed by community gardens in Darwin and Independence in 2010 and Bishop in 2011. In 2012, community gardens have taken root in Bridgeport (February), Crowley Lake (June), and Benton (July), and Tecopa residents are in the process of establishing a community gardening project in Death Valley.

Others include senior gardens at Clarke Street and Sunrise mobile home park in Bishop, a healing garden at Bishop Care Center, a pre-school edible garden at Clarke Street Head Start (Bishop) and tribal gardens in Bishop, Big Pine, Independence, and Lone Pine. The gardens are a mix of individual and communal plots, with some plots dedicated to providing produce for the USDA commodities distribution program in both counties.

To find out about work parties and activities in your local garden, call the Master Gardener office at 873-3179. Do you know of other gardens not listed here? Please let us know!

To Market, To Market

Wondering where you can find fresh, locally-grown produce this summer? Come on out and support your local farmers and gardeners!

- ♣ **Wednesdays 4-7pm**, Mammoth Lakes Farmers Market, in front of the Outlet Mall
- ♣ **4th Thursdays 5-8pm**, Independence Produce Swap, Owens Valley School
- ♣ **Saturdays 9-11am**, Bishop Farmers Market, on Church St. behind City Hall
- ♣ **U-pick Lavender Harvest** De La Cour Ranch, 5000 Horseshoe Meadow Rd, Lone Pine. Contact: (760) 264-3213 or www.delacour-ranch.com. June/July

Who You Gonna Call? – Master Gardener Help Line

Are you wondering what's up with your tomatoes or what's bugging your squash? The Master Gardener Help Line is here to help. Started in the spring of 2012, the Help Line is staffed by a group of trained Master Gardener volunteers who research and respond to gardening inquiries. If you have a question, give us a call at (760) 872-2098 or send an email to InyoMonoMG@ucdavis.edu. Photos are welcome. We check the Help Line mailbox and email account regularly and try to respond to all inquiries within a week.

Hot Off the Press

The following resources are available for free download on the Inyo & Mono Master Gardeners website (www.ucanr.org/injomono). Check out the [Gardening in the Eastern Sierra](#) page for these and other resources on desert and mountain gardening.

- ♣ **Local Food Resources Guide** compiled by Inyo & Mono Counties Master Gardeners. The latest info on who's farming what in the Eastern Sierra this summer and where to find locally-grown produce, lavender, dates, meat, and more. Please contact the Master Gardener office if you have additional resources to add to this guide. Last updated July 2012.

- ♣ **Bishop Tree Walk guide** created by Inyo & Mono Counties Master Gardeners. This self-guided walk includes a map and guide and highlights some of the best specimens of trees growing in the Manor Market area of West Bishop.
- ♣ **Gardening with Wildlife**. Published by Eastern Sierra Wildlife Care, this guide offers tips on how to build good relations with wild neighbors through humane, non-lethal methods.

Upcoming Workshops

Save the date for these upcoming workshops presented by the Inyo & Mono Master Gardeners. Additional workshops are being planned for the coming months in Bishop and Lone Pine. For details, check the [Gardening Events Calendar](#) page on our website (www.ucanr.org/injomono). If you'd like to be added to our email list to receive news about upcoming activities, please email hvmurray@ucdavis.edu. The following workshops are free to the public.

- ♣ **Monday, July 16 at 6:30pm – How to Install Drip Irrigation workshop**. Master Gardener Roberta Lagomarsini will discuss watering and lead participants through a hands-on demonstration on how to set up a drip irrigation system. *The workshop will be held at the Bishop Community Garden.*
- ♣ **Tuesday, July 24, 7-8:30pm. Water-Efficient Landscaping workshop**. Pam Geisel, Statewide Director of the California Master Gardener Program, will discuss water-efficient landscapes and lawn management practices that emphasize water efficiency. *The workshop will be held at Jill Kinmont Boothe School in Bishop.*

Eastern Sierra Gardening Info

Follow us on [Facebook](#) (UCCE Master Gardeners of Inyo & Mono Counties) to see what is happening in local gardens, and check out the Master Gardener website (<http://ucanr.org/injomono>) for tips on mountain and desert horticulture and high-altitude gardening. Our website maintains a calendar of gardening events and a Community Classifieds section for local gardeners to share materials. Stop in for a visit!

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Garden Tips by Master Gardener Paula Sayer:

- ♣ Deadhead bulbs when they are done flowering so the energy goes back into the bulb rather than making seeds.
- ♣ Take a photo of where your bulbs are when they're blooming so you don't accidentally put a spade through them later in the year. There's little more frustrating than having a split bulb the end of your shovel!

I look forward to seeing you at local farmers markets, community gardens, and Master Gardener workshops. Happy gardening, and enjoy the summer!

Sincerely,

Hannah Murray
Master Gardener Coordinator



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