



Sandoval County Master Gardener Newsletter



Sandoval County

New Mexico State University • Cooperative Extension Service • U.S. Department of Agriculture

Steve M. Lucero,
County Program Director

Lynda Garvin
Agriculture/Horticulture
Agent

Sandoval County Extension
P.O. Box 400
Bernalillo, NM 87004

Ph: 505-867-2582
Email:
Sandoval@nmsu.edu

New Mexico State University is an equal opportunity/affirmative action employer and educator.

NMSU and the U.S. Department of Agriculture cooperating.

SCMG Newsletter Submissions Deadline: 15th of each month

Please submit news, articles, events and photographs to:
scmgnewsletter@gmail.com

May 2014

COORDINATOR'S CORNER

Despite the annoying spring winds, dust and fluctuating temperatures of central New Mexico, we get a rush of adrenaline in observing the emerging green and color of the season. Once again we can feast our eyes on spring wild flowers in the open spaces. There are brush strokes of yellow from the bladderpods thanks to some winter moisture. There is abundant purple from the ubiquitous scorpion weed thanks to the monsoon rains last September. Last year at this time our open spaces were bare due to winter drought. I have observed other long forgotten wild

flowers around Placitas such the close-to-the ground 4-lobed white pansy-shaped bloomers, and delicate single stalk plants that are just revealing small periwinkle flowers. Oh, what are their plant names? I am in need of a NM spring wild flower guide.

May marks the start of the frost free growing season. So, happy planting into your soil! I will miss seeing most of you at the Training Classes, but do hope to see many of you around working on projects and attending CE classes. Our old time favorite speakers are

back this month. The entertaining Dr. Sam Smalidge will present on controlling vertebrate pests in your garden on May 1st. The amazing Jim Brooks of Soilutions will be talking about earth sponges and erosion control at the May 9th "Gardening in the Drought" workshop. After a two year absence, Del Jimenez from the Alcalde Research Center will be facilitating a hoop house building workshop on May 20th.

Sandy Liakus
SCMG Coordinator

FROM LYNDA'S DESK

Happy Spring! The lilacs are in bloom as well as many natives: verbenas, scorpion flowers, and vetches. I'm looking forward to getting to know the natives as they bloom in the landscape. I am also looking for a few volunteers to set up a Master Gardener help table at the Santa Ana Nursery on Dove Road for the Santa Anna Garden Wellness Program on May 8 from 11 – 4. Participants in the program will be picking up their

container garden kits and a few free vegetable plants. It would be great to have Master Gardeners available during pick-up hours to answer any gardening questions people may have as well as putting a face on the Hotline so folks on the pueblo feel more comfortable calling the Hotline for future questions. I am also looking for volunteers on June 7 to help me set up and people a table at a Butterfly event at The Great

Outdoors Nursery & Botanical Gardens on 2nd St. in the North Valley, just north of Alameda. It will be a learning opportunity for those wanting to know more about identifying and attracting butterflies.

Be well, Lynda

Growing Tomatoes

by Sam Thompson, SCMG and Mike Maurer, SCMG

We can't wait to harvest that first gorgeous ripe tomato of the season. Just picture the beautiful rich red tomato in your hand as you head for the kitchen to slice it up. Ok, we're getting ahead of ourselves. Let's go through a few things that will help make that mental image a reality.



Selecting. There are thousands of tomato varieties. Cooking tomatoes are dense while fresh eating tomatoes have lots of liquid. You can save the seeds from an open pollinating tomato but not from a hybrid one. There are numerous disease resistant hybrid tomato varieties. Indeterminate tomatoes have a growth habit that is best described as a wild child (concrete reinforcing wire makes a strong cage for containing indeterminate varieties) while determinate tomatoes tend to be manageable bushes (though for some the tomatoes tend to all come ripe at one time). Tomatoes come in a large range of sizes. If you want large beefsteak tomatoes consider that they are a late season variety (typically September). If you want fresh tomatoes in July and August plant some smaller varieties as well. Local nurseries, such as Alameda Greenhouse, Jericho and others carry both heirlooms and hybrid plants and seeds.



Growing. Tomatoes need sun, good draining soil and nitrogen. If you have sandy soil, simply add compost. If you have heavy clay you might want to consider using raised beds or containers. While most tomato plant instructions tell us that tomatoes need full sun, those instructions are not talking about 5000 feet and triple digits. Providing a bit of shade can help your tomatoes to set fruit throughout the summer. A simple structure over the plant with shade cloth can provide much needed relief.

Watering. Tomatoes need a consistent watering schedule. Blossom end rot (those black spots on the bottom of tomatoes) is attributed to a calcium deficiency that typically occurs when the plant is inconsistently watered. Drip or t-tape watering is an effective and efficient method. However, you chose to water your plants use mulch to maximize the benefits of watering. Overhead watering of plants is discouraged because it wastes water and can lead to diseases such as powdery mildew.

Protecting. If you plant before mid May be prepared to protect your tomatoes from a late frost. If you have put cages around your plants you could simply drape a sheet over the plant to protect from cold temperatures. One bite from the beet leafhopper can lead to the death of the plant. You can protect your plants with row cover, a lightweight material that will keep the leafhopper off your tomato. When you plant your tomatoes wrap row cover around the cage (be sure to put your water system down first) and secure the top (you can use clothes pins) and put soil around the row cover at the bottom. Completely covering your tomato plants will keep the leafhopper at bay (tomatoes are wind pollinated so the bees are not necessary). Once the plant grows out of the row cover the leafhoppers are not in the great abundance they are earlier in the growing season.

The Sandoval County Master Gardeners have established a seed library at the Esther Bone Library (learn more at sandovalcountyseedlibrary.org) that contains seeds for plants that grow well in our conditions. You are welcome to select seeds (all are open pollinators), grow the plant and harvest seeds to return to the library. Check the Sandoval County Master Gardeners website (aces.nmsu.edu/county/Sandoval/mastergardener/) for additional information about upcoming classes. We also have a hotline to handle your gardening questions, call 867-2582.

Previously published in the Rio Rancho Observer

Permaculture and Sustainability



Suzanne Maxwell leads a tour at her permaculture and sustainability demonstration site in Placitas.

Suzanne Maxwell, an active Master Gardener volunteer since 2010, a team leader for Homescapes Solutions and chair of Placitas Community Library's Landscape Committee, will speak about Permaculture and Sustainability at the Gardening with the Masters class at Meadowlark Senior Center in Rio Rancho On Tuesday, May 6 at 7:15pm.

Suzanne defines permaculture as a philosophy for living, gardening, working with nature and growing food, that reflects care for people, care for the earth, and a reinvestment in our future by limiting our needs.

Suzanne is certified in permaculture design and has a passion for sustainability. The property she and her husband live on in Placitas has been set up as a demonstration site for sustainability and permaculture principles. This Gardening with the Masters class will include photos illustrating elements of permaculture and sustainability, and handouts to help participants think about how they might apply sustainability and permaculture thinking to their own homes and land.

Brown Bag Dates and Intern/Mentor Events

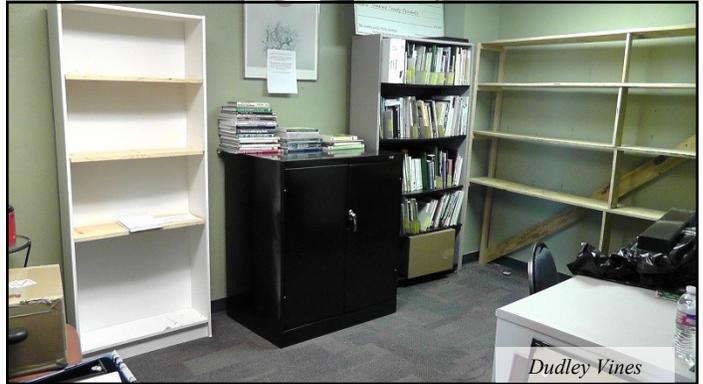
May
June-August

Plant ID for the Corrales Garden Tour Date: TBD
Attend a board meeting

Spring Makeovers by Dudley Vines, SCMG

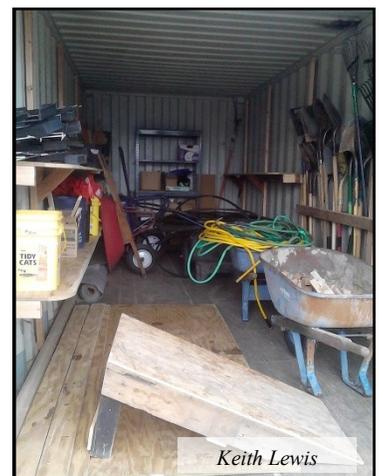
Thanks to Keith Lewis, SCMG Board Member-at-Large and Assistant Newsletter Editor, and intern Mike Stoy, some carpentry work got done in the Casita.

Repairs were expedited to the Casita south wall, which had suffered damage from the lawn sprinklers outside (many thanks to Sandoval County Manager Phil Rios and Facilities Manager Marvin Martinez). Since SCMG had to move everything out of the Casita during the repair process, Connie Walsh (SCMG Hotline Project Chair) asked Keith, a journeyman carpenter, if he could build some shelves for the library room while it was empty. Intern Linda Shaughnessy has been organizing library materials and plans to paint the shelves. At the same time, a computer terminal has been added to the library room and SCMGs will be able to use the room more effectively for horticultural research.



At the same time, the Hotline room has been organized to put the most commonly used reference material at hand, and also make a space for small project meetings.

Keith also stepped up, along with Mike Stoy and Buck Glenn to build shelves for the storage shed at the Rio Rancho WaterWise Demonstration Garden (another SCMG project) storage shed. Previously, all the tools and equipment for work at the garden were just sort of pushed into the shed, which made it difficult to reach what was needed without pulling a lot of other stuff out of the shed. Many thanks to Keith, Mike, and Buck for all their hard work.



Gardening in the Desert

The key is managing evaporation!

By John Zarola, with Dudley Vines

Evaporation occurs due to intense sunshine, high winds, low humidity, and high temperatures—all of which we have in abundance. Methods we can employ to minimize evaporation include

- Amending the soil with compost to improve water retention;
- Avoiding bare soil by mulching, shading, and cover cropping
- Putting the right plant in the right place
- Incorporating efficient irrigation options

AMENDING THE SOIL

Compost is decomposed organic material. Amending soil with compost improves water infiltration and retention. Because compost decomposes (adding nutrients to the soil), it should be replenished every Spring and Fall. Compost can be used as a topical application or mixed into the soil



MULCHING & SHADING

Garden Mulches are protective soil covers of various materials placed around plants. Mulch reduces evaporation and overall water use, moderates soil temperature fluctuations, reduces weed growth, softens the effect of rainfall and protects from wind, reduces soil erosion and compaction, and gives finish and style to a garden. In addition, organic mulches decompose, improving soil fertility. When mulching, leave a 4" - 6" gap from base of the plant. And, importantly, irrigation water should reach the soil *under* any type of mulch. Water is most efficiently applied directly to the soil.



THE RIGHT PLANT IN THE RIGHT PLACE

What are the "right plants"? To get the most from the water you use, plant abundant producers like tomatoes, squash, peppers, and egg plant. Plant drought tolerant vegetables such as black-eye peas, mustard greens, pole/snap beans, New Zealand spinach, chili peppers, garbanzo bean, tepary bean, amaranth, chard, and some varieties of tomatoes. Plant only what you can reasonably care for in the time you have available.

Landscape with low water use plants suitable for our climate zone. Plant perennials (trees and shrubs) in the Fall – less heat means less stress on the plant while the root system is being established.

Continued next page



Continued from Previous page

What about the right place? Here are some things to think about:

- Group plants with similar water requirements together
- Consider prevailing winds
- Consider microclimates - masonry walls
- Consider the use of movable pots and planters
- North side: Winter cold; Summer heat
- South side: midday and afternoon sun
- East side: morning to midday sun
- West side: intense afternoon heat in summer
- Provide shade using row covers, structures, arbors, lattice, companion planting, or dense planting



EFFICIENT IRRIGATION

Water management options include rainwater harvesting, clay pot irrigation (ollas), self watering planters (pots), jug drip technique, drip irrigation, soaker hose, and recycling household gray water. Water early in the morning (before sunrise) to prevent evaporation, water infrequently but slowly and deeply, and water at the dripline, where the absorptive roots of the plant are.



Lastly, too much water wastes money, and too little can kill the plant. How do you know if you're watering correctly? You can check the soil moisture by feel, and you should most definitely watch your plants for evidence of irrigation problems (see box).



Signs of Underwatering

- Soil is bone dry
- Older leaves turn yellow or brown and drop off
- Leaves are wilted
- Leaves curl and become brittle
- Stunted growth
- Plant is dead

Signs of Overwatering

- Soil is constantly saturated
- Leaves turn a lighter shade of green, or turn yellow
- Young shoots are wilted
- Leaves are green yet brittle
- Algae and mushrooms are present
- Excessive growth
- Plant is dead

Quilt Raffle and Other Fundraising Events!

The first meeting of the SCMG Fund Raising Committee was held April 8, 2014. Committee Chair Gretchen Neiman and members Julia Runyon and Patricia Barger were present. The first project for fund raising will be a quilt raffle to be held during the Corrales Garden Tour. The quilt "Nova" is done and is currently being quilted. It will be hung a few weeks before the Garden Tour at Quilts Ole on Corrales Road in Corrales where tickets will be sold. There will also be a second and third place prize. Tickets will be \$5.00 or three for \$10.00.



There are also plans for a plant sale at Idalia Market during their Lavender Festival on Saturday, June 14, 2014. If you have healthy house or garden plants you would like to donate, please contact any of the committee members. Please make sure plants are in clean pots that you do not want back. The committee will take care of the pricing.

If you would like to join the next Fund Raising Committee meeting, please see us at the County Extension Office on Tuesday, May 20, 2014 from 1-2 PM (This is one hour before the monthly board meeting). If you are interested in purchasing raffle tickets, contact Gretchen, Julia, or Patricia (contact information is in your SCMG roster).

Heritage Day at Casa San Ysidro

Many, many thanks to the vets and almost vets (interns) for supporting the SCMG activities at Casa San Ysidro in Corrales. With your gracious volunteers signing up at both the training class and wonderful pizza/potluck celebration last month, it all looks A-OK for the upcoming Heritage Day celebration at the Casa on May 17 from 10 am to 4 pm. Therese Barts will be contacting you very soon for your shift preference either in the morning or afternoon.

We will be planting marigolds, sunflowers, beans, and Indian corn in take home planters with the children coming to the Casa on that day. Of course, folks attending will have gardening questions that we will attempt to answer, too. This is a fun, celebratory project where you will meet the public and other SCMGs for gaining volunteer hours. So, please contact Therese (see your SCMG member roster) if you want to join us.

Therese has already robbed the Esther Bone seed library for marigold seed, but if you should have some extra seed you are willing to share, she will be happy to come to pick it up to plant with the children. Thanks a million.

The SCMG newsletter is looking for a few good volunteers!

Email scmgnewsletter@gmail.com

Harvesting Rainwater by Dudley Vines, SCMG

Water is a precious commodity here in New Mexico. It makes sense to take advantage of rainfall for landscape and garden irrigation if we can. But is it too difficult or too expensive to do? There are some simple steps just about anyone can take to capture at least some of the rainwater that currently runs off our property and down city streets. Let's take a look.

Passive or active? That is the question when it comes to rainwater harvesting. If you have gutters and downspouts on your house, you're set for active harvesting. If you don't have gutters, you can still implement effective passive harvesting.

The photo on the right shows one method of passive collection. Rainwater runs off the concrete into a ditch that directs it to a basin around a tree. The downhill side of the basin has an opening for overflow, and the soil has been contoured to carry the water overflow to another tree and planting area. Simple, right?



The photo below shows a simple technique for active harvesting. A rain barrel has been placed beneath a downspout from

the rain gutter. A garden hose is connected to the spigot to distribute the rainwater wherever it might be needed. In this particular case, the hose runs inconspicuously to a basin constructed around a large walnut tree 50 feet away and the valve is left open. All rainwater flows directly to the walnut tree without any trenching or construction of a ditch.

Active rainwater harvesting using gutters and downspouts has a huge advantage in that the entire area of the roof is used to collect the water. Table 1 shows average rainfall by month for several communities in New Mexico. You can see that Albuquerque averages from 0.39 to 1.52 inches per month depending on the season. Of course there are usually more than one shower in a month, so for talking purposes, let's assume a 1/4 inch rainfall. 1/4 inch is about 0.15 gallons of water per square foot. That doesn't sound like much, does it? But consider that rain coming off the roof of an 1800 square foot house (not uncommon in this area). 1800×0.15 gallons = 270 gallons. That's a substantial amount of water for a typical measly Albuquerque shower!

Passive collection using large areas of watershed like a patio or driveway, or even running off the roof onto sidewalks can capture significant quantities of water, too.

Source: City of Albuquerque Irrigation Audit Manual

INCHES OF AVERAGE MONTHLY RAINFALL FOR NEW MEXICO TOWNS*

**NM Towns	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
Abiquiu Dam	0.38	0.26	0.51	0.55	0.83	0.71	1.59	2.01	1.13	0.88	0.53	0.34	9.71
Alamogordo	0.73	0.52	0.46	0.32	0.50	0.83	2.13	2.13	1.68	1.05	0.54	0.81	11.68
Albuquerque	0.39	0.40	0.48	0.50	0.61	0.65	1.31	1.52	1.02	0.81	0.48	0.49	8.66
Animas	0.70	0.54	0.49	0.19	0.17	0.45	2.20	2.36	1.46	0.99	0.57	1.03	11.15



Hoop House Building Workshop

Learn how to build an affordable and practical hoop house

When: Tuesday, May 20, 2014

Time: 8:00 AM to 4:00 PM

Where: 2178 Acapulco RD, NE, Rio Rancho

Bring your lunch.
Snacks and drinks
provided

Limited Space available
RSVP by May 16
Sandoval County
Cooperative Extension Service
(505)867-2582 or
Sandoval@nmsu.edu



If you are an individual with a disability who is in need of an auxiliary aid or service to participate in the meeting, please contact Lynda Garvin at (505) 867-2582 by May 16, 2014.

New Mexico State University is an affirmative action, equal opportunity employer and educator.
New Mexico State University and the US Department of Agriculture cooperating.



College of Agricultural, Consumer and Environmental Sciences
Online at aces.nmsu.edu



Landscape Irrigation by Dudley Vines, SCMG

There are lots of references about watering landscapes, but things can get complicated when you try to factor in soil infiltration rate and field capacity, water requirements for different plant varieties, climate and plant evapotranspiration, and so forth. Here is a simple guide for drip irrigation. Remember, you should apply the water to the adsorptive root zone of the plant. The first table indicates how often to water, and how deeply, for each season.

How Much & How Often		Seasonal Frequency - Days Between Waterings				Water This Deeply (Typical Root Depth)
Water to the outer edge of the plant's canopy and to the depth indicated. Watering frequency will vary depending on season, plant type, weather and soil.		Spring Mar - May	Summer May - Oct	Fall Oct - Dec	Winter Dec - Mar	
Trees	Desert adapted	14-30 days	7-21 days	14-30 days	30-60 days	24-36 inches
	High water use	7-12 days	7-10 days	7-12 days	14-30 days	24-36 inches
Shrubs	Desert adapted	14-30 days	7-21 days	14-30 days	30-45 days	18-24 inches
	High water use	7-10 days	5-7 days	7-10 days	10-14 days	18-24 inches
Groundcovers & Vines	Desert adapted	14-30 days	7-21 days	14-30 days	21-45 days	8-12 inches
	High water use	7-10 days	2-5 days	7-10 days	10-14 days	8-12 inches
Cacti and Succulents		21-45 days	14-30 days	21-45 days	if needed	8-12 inches
Annuals		3-7 days	2-5 days	3-7 days	5-10 days	8-12 inches
Warm Season Grass		4-14 days	3-6 days	6-21 days	15-30 days	6-10 inches
Cool Season Grass		3-7 days	none	3-10 days	7-14 days	6-10 inches

These guidelines are for established plants (1 year for shrubs, 3 years for trees). Less water is needed during cool or rainy weather. Additional water is needed for new plantings or unusually hot or dry weather. Drip run times are typically 2 hours or more for each watering.

The next table shows the maximum watering time to reach the desired depth for various types of soil and drip emitter rates (note: lawns are typically not irrigated with drip emitters; see [NMSU Ext Pub H504](#) for turf watering information). Longer times will waste water because it will pass through the root zone and be lost. Times are based on average infiltration rates for soil types. You know how to determine your soil type from SCMG class, right?

		Watering Time in Hours					
Depth	Emitter Flow Rate	Soil Type					
		Sandy	Sandy loam	Loam	Clay loam	Silty clay	Clay
1 Foot Groundcover Small shrubs	1 gph	1.4	2.3	3.8	5.1	10.3	7.2
	2 gph	1.1	1.9	3.1	4.2	8.5	5.9
	4 gph	0.9	1.5	2.6	3.6	7.0	4.8
2 Feet Shrubs Small trees	1 gph	4.2	6.8	11.5	15.4	31.1	21.6
	2 gph	3.4	5.6	9.5	12.6	25.5	17.7
	4 gph	2.8	4.6	7.8	10.4	20.9	14.5
3 Feet Trees	1 gph	7.9	13.0	22.0	29.3	59.1	41.0
	2 gph	6.5	10.7	18.0	24.1	48.5	33.7
	4 gph	5.3	8.7	14.8	19.7	39.8	27.6

If you have two plants with different irrigation requirements on the same irrigation zone (e.g. xeric versus high water use plants), you may have a problem. You might be able to add or remove drip emitters at one of the plants to achieve a compromise on how long to run the water, but watering frequency may prove to be a sticky issue. Plant roots need air as well as water, so watering too often can damage or kill a plant by keeping the soil saturated. You can hand water a thirsty plant occasionally to avoid over-watering xeric plants on the same zone. Once you have implemented an irrigation schedule, keep an eye out for symptoms of over- or under-watering, such as wilting or yellowing of leaves, and adjust accordingly.

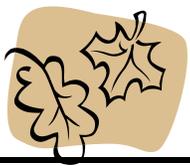
Source: "Guidelines for Landscape Drip Irrigation Systems", AZ Landscape Irrigation Guidelines Committee, July 2001

Congratulations to the Interns (Class of 2014) on Completing their Training

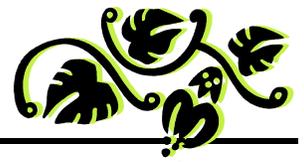


Save the Dates: July 24th – 26th, 2014
Los Alamos, NM
New Mexico Master Gardener's Conference





SCMG May 2014



Sun	Mon	Tue	Wed	Thu	Fri	Sat
<p>SCMG Board Meetings Third Tuesday of month, Sandoval County Extension Office, 2:00-3:00pm</p>	<p>Click on links for details</p>	<p>Telephone Hotline Daily 9:00am-12:00, 1:00-4:00pm in Casita</p>	 <p>MASTER GARDENER Sandoval County</p>	<p>1 -WaterWise Garden 9:00-11:00 -Adv Class: Controlling Wildlife in Your Garden 9:00-11:00</p>	<p>2</p>	<p>3 -Idalia Rd Marketplace opening weekend</p>
<p>4 -Idalia Rd Marketplace opening weekend</p>	<p>5</p>	<p>6 -Gardening with the Masters "Gardening Concepts from Permaculture"</p>	<p>7 -DeLavy House garden 9:00am</p>	<p>8 -Santa Ana Nursery Garden Wellness Program 11:00-4:00</p>	<p>9 -SCMG Drought Gardening Workshop 8:45am-noon</p>	<p>10 -Seed2Need 8:00-noon</p>
<p>11</p>	<p>12</p>	<p>13 -</p>	<p>14</p>	<p>15 Newsletter Articles DUE! -WaterWise Garden 9:00-11:00</p>	<p>16</p>	<p>17 -Seed2Need 8:00-noon -Heritage Day at Casa San Ysidro</p>
<p>18</p>	<p>19</p>	<p>20 -SCMG Fundraising Committee 1:00-2:00pm -SCMG Board 2:00pm -Hoop House Workshop 8:00am-4:00pm</p>	<p>21</p>	<p>22 -</p>	<p>23</p>	<p>24 -Drought proofing your garden</p>
<p>25</p>	<p>26</p>	<p>27 -</p>	<p>28</p>	<p>29</p>	<p>30</p>	<p>31</p>



SCMG June 2014



Sun	Mon	Tue	Wed	Thu	Fri	Sat
<p>SCMG Board Meetings Third Tuesday of month, Sandoval County Extension Office, 2:00-3:00pm</p>	<p>Click on links for details</p>					
1	2	3	4	5 - WaterWise Garden 9:00-11:00	6	7 - Butterfly event at The Great Outdoors Nursery & Botanical Gardens
8 - Corrales Garden Tour	9	10 - Home composting basics	11	12	13	14 - Lavender Festival at Idalia Rd Marketplace
15 Newsletter Articles DUE!	16	17 -SCMG Board 2:00pm	18	19 - WaterWise Garden 9:00-11:00	20	21
22	23	24	25	26	27	28
29	30					