

COOPERATIVE EXTENSION

University of Arizona and U.S. Department of Agriculture cooperating.

the Cochise County Master Gardener

NEWSLETTER

VOL. 5, NO. 2

FEBRUARY 1994

PEAS

Barbara Kishbaugh
Staff Writer

Peas are one of the most beneficial vegetables to grow in your garden. They are legumes which means they are nitrogen-fixing plants. They develop bacteria nodules on their roots which hold nitrogen, making them attractive to other plants which require the nitrogen. Peas serve the dual purpose of giving the gardener a tasty vegetable to eat and providing a supply of nitrogen to neighboring plants.

Peas are cold tolerant and can be planted in January or February. They will be one of the first vegetables to mature and a crunchy pea pod will be enjoyed before the remainder of the garden plants are even awake. Numerous varieties of peas are available with some maturing in as little as 50 days. Pea pods can be picked before fully formed, when the peas are flat, and used as a stir-fry vegetable. They are also great raw in salads or they may be pickled. Lightly cooking preserves crispness and flavor and maintains the vitamin integrity.

Soak peas overnight before planting in moist, loose soil with good drainage. Don't water until the peas are up as the seed may rot if the ground is too wet.

Peas require support to remain upright to keep the vegetable off the ground. A string or wooden trellis will assist the plants by allowing it to have a base to aid while growing. Also, more sunlight will be available and this also will produce a healthier, better producing plant. One end of the garden could be trellised and different varieties planted at intervals to assure a continual supply of peas. Bush type peas are also available and they require no stabilizing.

Picking the peas daily will encourage additional blossoming and deliver longer lasting results. When picking, do not jerk the plant or part of the vine may tear off. Develop a technique of snapping the pod off by using your thumb or fingernail.

Peas will stop producing when the weather gets warm, or if the pea pods are not picked and allowed to harden. They require substantial water, but powdery mildew may follow with over-head watering, so a system of ground watering is recommended.

The season for peas seems short, so plant plenty, pick regularly, and freeze or cook right after picking. The flavor will be sweet, the texture crisp, and the total package healthy.

450 Haskell • Willcox, AZ • 384-3594
1140 N. Colombo • Sierra Vista, AZ • 458-1104



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Robert E. Call

Robert E. Call
Extension Agent,
Horticulture

THE AGENT'S CORNER

Robert E. Call
Horticulture Agent

QUESTION: I have heard that ashes from my wood stove are not good for my soil. In the Eastern United States I would put wood ash on my garden. I have put some out this winter—will they help or hurt my garden?

ANSWER: Wood ash is a source of phosphorus and potassium which are essential plant nutrients. The second and third numbers on a fertilizer bag indicates the percentage of P_2O_5 and K_2O in the bag. Our desert soils usually have adequate native amounts of potassium but need additional phosphorus. Another reason wood ashes are placed in the soil is to increase the pH of the soil. Wood ash have pH's in the range of 8 to 12 depending on the tree species and are usually twice as potent as lime for lowering soil pH. In the East, because of higher precipitation amounts, soils are naturally acid; pH is below neutral 7. Ideal garden soil pH is 6.8 or nearly neutral. Our desert soils generally have a pH range from 7.5 to 8.5. We want to acidify our soils rather than try to make them more alkaline. Therefore, wood ash is not recommended as a soil amendment in the arid West.

A small amount of wood ash that has been placed in the garden will probably not hurt the soil and crops to be grown there, but **DO NOT** apply wood ash in the future.



QUESTION: Some of my apple trees are showing a few flowers and leaves. Is this normal? If not, what can I do about it?

ANSWER: This is not normal. Because of our unusually warm winter weather the chilling requirements to complete winter rest have been completed and heat units for bud break are further along than normal. The leaf and flower buds that have broken and are beginning to grow will be frozen back because we have cool weather ahead of us. These few blossoms will not adversely affect this year's crop. There is nothing that you can do about fruit flowers that have bloomed this early that is cost effective. They just have their seasons mixed up!

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NEW MASTER GARDENER CLASS TO BEGIN SOON!

On February 23 and lasting for 13 weeks, a new Master Gardener class will begin. It will be held at the University of Arizona, Sierra Vista Campus (1140 N. Colombo) from 4:00 - 7:00 pm. The fee for the class is \$50. For more information, please call the Cooperative Extension office in Willcox or Sierra Vista.

Staff:
Carolyn Gruenhagen
Barbara Kishbaugh
T.J. Martin
Elizabeth Riordon
Virginia Westphal



Pea

COMPOST & MULCH FOR SALE BY CITY

On Saturday and Sunday, February 12 and 13, the City of Sierra Vista will hold a public sale of both compost and mulch from 8:00 am to 2:30 pm on both days. The sale will be held at the city compost site, which is located at the City Wastewater facility on Hwy 90E. The materials have been produced entirely from community yard wastes (grass clippings, tree and shrub trimmings, etc. collected during the past year. Bring your pickup truck or trailer and a city employee will load it for you with a bucket loader. Come early as it will be first come, first served.

Compost will help your soil retain moisture, add nutrients, and will improve plant growth and vigor. The mulch will deter weeds, lower your watering requirements, and help control temperature extremes in the soil.

For more information, contact the Department of Public Works at 458-3315.

High on the Desert

First Annual High Desert Gardening & Landscaping Conference
 February 17 & 18, 1994
 Ramada Inn - Sierra Vista, Arizona

PROGRAM

Thursday, February 17, 1994
 7:30 - 8:30 Registration and Breakfast
 8:30 - 9:30 Welcome and Keynote Address
 Judith Phillips*, *Diversity, Fitness, and Balance of High Desert Landscapes*

Session I 9:45 - 11:00
 A. Dr. Jimmy Tipton, *Desert Willows*
 B. Ron Bemis, *Native Grasses*
 C. Cathy Wertz, *Establishing a Wildflower Meadow*
 11:15 - 12:30 Visit Exhibits
 12:30 - 1:45 Lunch
 Dr. Tom Doerge, *Desert Soils*

Session II 2:00 - 3:15
 A. Gail Haggard, *High Desert Landscaping*
 B. Lynn Tilton, *Feeding Your Family From Your Garden*
 C. Henry Haros, *Evergreen Trees*
Session III - Workshops 3:30 - 5:00
 A. Jim Koweek, *Side Boxing Techniques*
 B. Paige Bakarich, *What the Indians Ate*
 C. Rob Call, *Pruning & Training Fruit Trees*
 D. Emily Vardaman and Cathé Fish, *Passive Solar Greenhouses*

Friday, February 18, 1994
 7:30 - 8:30 Registration and Breakfast
 8:30 - 9:15 Nancy Stallcup, *Wild Flower Slide Show*
 Cathy Wertz, *AZ Native Plant Law*

Session IV 9:30 - 10:45
 A. David Epele, *Cactus and Succulents*
 B. Richard Pecoraro, *Bio-diversity*
 C. Tom DeGomez, *Small Fruits for the High Desert*
 D. Joanne Camron-Hild, *Selecting the Right Tree, Place, and Time*

Session V 11:00 - 12:15
 A. Ted Hodoba, *Chihuahuan Desert Plants*
 B. Dr. Deborah Young, *Healthy Trees*
 C. Susan Corl, *Growing and Preserving Local Flowers*
 12:30 - 1:45 Lunch
 Dr. Dave Langston, *African Bees*
 Door Prizes and Raffles

Session VI 2:00 - 3:15
 A. Dr. Mike Kilby, *Nut Trees*
 B. Matt Johnson, *Woody Legumes for High Desert Landscapes in Southeastern Arizona*
 C. MiMi Camp, *Medicinal Plants*
 D. Tim Udall, *Fruit Trees for the High Desert*
Session VII - Workshops 3:30 - 5:00
 A. Dr. Mike Kilby, *Tree Grafting*
 B. Bill Free, *Drip Irrigation Design*
 C. Dr. Dave Langston, *IPM For the Backyard*
 D. Sandy Anderson, *Snakes in Your Garden*
 5:15 - 7:00 Conference Summary and Reception

Saturday, February 19 - Optional Field Trips
 A. Growing Vegetables in Worm Castings
 Mary Diamond - Tierra Y Cielo
 B. Arizona Cactus & Succulent, Inc.
 David Epele - Bisbee, AZ
 C. Landscapes of Sierra Vista
 Henry Haros
 D. San Pedro River Tour
 Carline Burrus

All tours are included in the registration fee. Transportation is on your own with carpooling suggested. Maps will be provided. The number of participants is limited to the first 20 to register for the Landscapes of Sierra Vista tour. Please indicate on the registration form.

* Judith Phillips, author of *Southwestern Landscaping With Native Plants*, has worked in ornamental horticulture since 1970 as a professional plant grower and landscape designer. For the past few years she has worked almost exclusively with arid-land native plants, which she considers the most interesting area of horticulture. She is the owner/grower of a native plant farm in Veguita, New Mexico.



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High on the Desert Conference Registration

Name _____
 Address _____
 City _____ State _____ Zip _____
 Telephone _____

Make check payable to: High Desert MG Conference
 Mail to: U of A Cooperative Extension Office
 ATTN: Rob Call
 1140 N. Colombo, Sierra Vista, AZ 85635
 (602) 458-1104, Ext. 141

Please indicate your preference for each session:

Full Conference \$60.00 After Feb. 11 \$70.00
 One Day \$40.00 After Feb. 11 \$45.00

	A	B	C	D	A	B	C	D	A	B	C	D
I	A	B	C	D	A	B	C	D	A	B	C	D
II	A	B	C	D	A	B	C	D	A	B	C	D
III	A	B	C	D	A	B	C	D	A	B	C	D
IV	A	B	C	D	A	B	C	D	A	B	C	D
V	A	B	C	D	A	B	C	D	A	B	C	D
VI	A	B	C	D	A	B	C	D	A	B	C	D
VII	A	B	C	D	A	B	C	D	A	B	C	D

Amount Enclosed \$ _____
 Landscapes of Sierra Vista Tour
 Check here for vegetarian meals
 [This form may be reproduced]

SOLAR GREENHOUSES- PART VIII

Emilie Vardaman

Now that you know some of the basic design principles for a solar greenhouse and have considered how you will store the heat you gather, you need to begin to think about the kind of glazing you will use in your greenhouse.

Glazing is any kind of transparent or semi-transparent material that will let light into the greenhouse but keep out the cool air and wind. Most houses use glass as a glazing, generally clear, but sometimes translucent glass such as the glass used in some bathroom windows, or glass block.

You have many options for greenhouse glazing. There are specialty glazings, available in some lumber yards or hardware stores, such as reinforced fiberglass, acrylics, and flexible glazings such as acetate or vinyl. What you choose depends on your budget, how you want the room to look, and safety.

Visually, the most popular material is glass. However, with glass there are safety issues to consider. Most people want south facing glass quite low to the ground, to admit plenty of winter sun into the room. Check with your local code folks to see if plexiglass or shatterproof glass is required within two feet or so of the floor. This is an important consideration, as it's quite easy for a child to injure her or himself on low glass, and it's even easy for careful adults to bump into glass while cleaning or doing gardening work.

If you choose to use glass, see

if you can find patio door replacement glass—it's a great size, it's tempered and safe, and it's already double glazed (two layers thick). You can also look for used windows. Also, sometimes a window manufacturer will have some custom windows made up that no one has come to claim and will agree to sell them to you at a discounted price. If you choose to use windows, look carefully and begin to plan your design around the windows you find.

Acrylic and reinforced fiberglass come in sheets up to four feet wide. Both are easy to work with, but fiberglass contains glass fibers. It's potentially dangerous while you're working with it. Be sure to wear gloves and wear a mask while you are cutting it so you don't inhale any tiny glass threads.

Thin vinyls and acetates are also easy to work with and come in a wide range of widths. They can be cut with scissors, are safe, fairly inexpensive, and easily repaired or replaced. If you are on a low budget, you may wish to design for future glass but use a low cost glazing for a few years so you can get started using a greenhouse. Add windows one or two at a time as you can afford them.

One of the most important things to remember when installing glass or any glazing is that the glazing needs to be seal sealed. glass that fits loosely in its pane will be drafty, and your greenhouse will lose all its hard gathered heat faster than you can imagine. Caulk well with a high grade (25 year life) acrylic blend caulk around each piece of glazing

and each window or pane that isn't operable.

If you use flexible film, caulk along the stud in the wall, lay the film on carefully, then tack it down with a few staples before covering the seams with trim.

Caulk may be the single best investment you can make in your greenhouse (or in your house, for that matter). Caulk while you construct and avoid air leaks later. Get a little stock in a company that makes caulk—you'll be buying lots of the stuff.

It is possible to construct a temporary greenhouse without a floor using cement blocks or landscaping timber for the footer for the wall. Used studs, flexible film glazing, and a gently sloping shed roof won't cost a fortune. Add some insulation and caulk, and you can create a useable greenhouse for about a thousand dollars.

If you work with an architect, use expensive windows, lay a beautiful tile floor, and add a hot tub you can spend over thirty thousand dollars.

Think about your budget, your needs, future additions and modifications. Bring your sketches, design ideas, and questions to the greenhouse workshop at the High Desert Gardening & Landscaping Conference February 17 & 18 and Cathé and I will be glad to talk with you.



WHAT'S BUGGING YOU?

by T.J. Martin

Dear Fellow Gardeners: I need your help! Over the past four years I have written this column in order to try and help folks solve their garden (and sometimes home) pest problems. But now I am running out of ideas of pests to write about. Yes, I know that there are thousands of bugs listed in books, but I don't want to write about the "European Fittlebeetle," I want to write articles about LOCAL pests that are a problem to real, live people right here in Cochise County, AZ. In the past, I have gotten most of my ideas from suggestions of clients, co-workers, the Extension Agent or from simply walking out into my backyard garden and seeing what was currently chomping on my plants.

So I am requesting YOUR assistance in coming up with ideas. Let me know about a couple of pests that you would like to get rid of. (Sorry, I can't do anything about not-so-perfect spouses, kids, in-laws, neighbors, *etc.*...). Look at your own garden, shrubs, fruit trees, lawn and so forth and let me know what you find (or remember finding at another time) that you wish was not there. You can get these lists to me by writing to me at the following address:

T.J. Martin
c/o U of A Cooperative Extension Office
1140 N. Colombo
Sierra Vista, AZ 85635

Or call the office at 458-1104, extension 141. If you don't get a living person to take the message, you can leave your message on the voice mail. I will make my list from these suggestions and do future columns from that list.

Please do not expect to see your "pet peeve" right off the bat. What I will do is write about the "Most Unwanted" pests first and follow with those which didn't seem to be as much a problem to as many people. But hey, if you happen to be the ONLY person to give me a call, then I will do something about YOUR pest, even if it happens to be about as common as the proverbial snowball in Phoenix. If you care enough to take the time to make a suggestion, then I care enough to write about it for you.

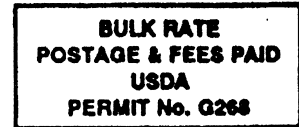
On the back page is a list of the subjects that I have already written about. Give it a glance before you contact the office. I may have already covered your particular pest and you just missed that particular newsletter. If you would like a copy of one of the topics listed, just contact the Cooperative Extension Office and ask for it. Please mention the issue date because that is how we have the articles filed. Thanks in advance for your help!

ROOMS NEEDED

Do you have a spare room you might offer to a speaker for the *High on the Desert* conference? If you do, please call the Cooperative Extension office in Sierra Vista at 458-1104, Ext. 141.

Room moderators are also needed for the conference. Call the above number if interested.

Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the United States Department of Agriculture, James A. Christenson, Director, Cooperative Extension, College of Agriculture, The University of Arizona and Arizona Counties cooperating. The University of Arizona College of Agriculture is an equal opportunity employer authorized to provide research, educational information and other services only to individuals and institutions that function without regard to sex, race, religion, color, national origin, age, Vietnam Era Veteran's status, or disability. The information given herein is supplied with the understanding that no discrimination is intended and no endorsement by Cooperative Extension is implied. Any products, services, or organizations that are mentioned, shown, or indirectly implied in this publication do not imply endorsement by the University of Arizona.



Address correction requested

LIST OF PUBLISHED MASTER GARDENER NEWSLETTER PEST-RELATED ARTICLES

ANTS		NOV '91	GRASSHOPPER	AUG '90
APHIDS		MAY '90	GREEN FRUIT BEETLE	SEP '90
APPLE WORM		APR '90	GREEN JUNE BEETLE	SEP '90
BLACK WIDOW SPIDERS		OCT '93	HARLEQUIN BUG	OCT '91
CABBAGE LOOPERS		JUN '90	LADYBIRD BEETLE (LADYBUG)	DEC '91
CABBAGE MAGGOT		NOV '90	LOCUSTS	AUG '90
CODLING MOTH		APR '90	MEXICAN BEAN BEETLE	JUL '90
COTTONY-CUSHION SCALE		MAY '92	MITES	JUL '92
CUTWORMS		APR '92	MULBERRY CATERPILLAR	SEP '91
EARWIGS		DEC '90	PARSLEYWORM	OCT '90
ECOLOGICALLY SANE INSECT CONTROL			PEACH BEETLE	SEP '90
	(1)	FEB '91	PILLBUGS	MAY '92
"	(2)	MAR '91	PRAYING MANTIDS	OCT '91
"	(3)	APR '91	PREPARATION FOR FALL	NOV '93
"	(4)	MAY '91	PREPARATION FOR SPRING	MAR '92
"	(5)	JUN '91	SPINED SOLDIER BUG	SEP '91
"	(6)	JUL '91	SQUASHBUG	AUG '92
"	(7)	AUG '91	STINKBUG	SEP '91
FALSE CINCH BUG		JUL '93	SPITTLEBUGS	JAN '92
FIG BEETLE		SEP '90	TARANTULAS	FEB '92
FROGHOPPERS		JAN '92	WHITEFLIES	DEC '91