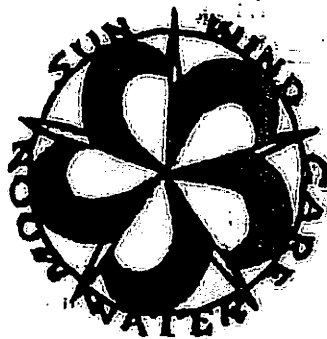


COOPERATIVE EXTENSION

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UNIVERSITY
OF
ARIZONA

Robert E. Call

Robert E. Call
Extension Agent,
Horticulture

the Cochise County Master Gardener

NEWSLETTER

VOL. 3, NO. 3

MARCH 1992

The staff of the Master Gardener Newsletter dedicates this issue to the memory of our friend and fellow Master Gardener, Peter Whitman. Peter wrote his last Plant of the Month article just before his death on February 12.

PLANT OF THE MONTH

Peter Whitman
Staff Writer

My first experiences with *Nandina domestica* were as plantings in front of businesses. They had been planted in a small shard of dirt by the front door, and were there only to meet some zoning requirement. In these applications, they always appeared scraggly and unkept. But, it is a good example of how tough Nandina actually is. I never thought much of it until I saw a decent application in a private garden.

Many may be asking, "What is Nandina?" It is a plant which is often mistaken for a bamboo, but isn't. It does have a bamboo type structure, and in a landscape the potential is the same as for a small bamboo. The books say it gets up to 6 feet tall, but I have never seen it that big. Part of the year it takes on an autumn-type color that can add to a garden's fall effect. In addition to its potential as an accent plant, Nandina makes a great small hedge.

While I was researching the article, I found that the dwarf variety also makes a good bonsai. I had never thought of Nandina as a bonsai, but I can see how it would work. It has a small leaf structure and thin branches which gives the plant a good structure for a bonsai.

The next time you see what looks like bronze bamboo, stop and check it out. You'll find that it does have a place in your garden.

2500 Fry Blvd * Sierra Vista, AZ 85635 * 458-1104

March 92 #144

BUDDY BUG - DADDY-LONG-LEGS

Elizabeth Riordan
Staff Writer

Childhood summers were filled with adventure. Bravery was often challenged, and then proved, in the vegetable garden. Who was brave enough to let a grasshopper "spit" inside a closed fist? Who dared pick up the huge, squishy tomato worm, or the spiny horned lizard? And, of course, who could stay calm, and not wiggle, while a Daddy-long-legs ran up a bare arm or leg?

The Daddy-long-legs, or Harvestman, is an arachnid, not an insect, and is related to the spider. It is of the order Opiliones and is sometimes named Phalangida. It has long, delicate legs (up to 1.8 inches each), longer and thinner than the legs of the true spider. Its two eyes are on a median knob. The body is small (0.04 to 0.9 inch) and round or oval, and is not sectioned. Some adult harvestmen are said to give off a bad odor when disturbed, but I personally have never come across one that could give off an odor.

This arachnid can be found in temperate and tropical climates worldwide. They are usually sighted in late summer in fields and on sunny walls. Daddy-long-legs will eat dead vegetable and animal matter, small insects, spiders, and mites. Their eggs are laid in the autumn in a small crack in the soil, and will hatch the following spring.



Nandina domestica

MARK YOUR CALENDAR: IT'S PLANT SALE TIME!

Barbara Shelor
Staff Writer

Tohono Chul Park - 7366 Paseo del Norte, Tucson. Year-round plant sale Mon-Sat, Oct. 1 - May 1 (10:00 am - 2:00 pm); May 1 - Oct. 1, (9:00 am - 1:00 pm).

Reid Park - Flower & Garden Fair, Mar. 15 (10:00 am - 2:00 pm).

Tucson Botanical Garden - 2150 N. Alvernon Way, Tucson. Spring plant sale, Mar. 21-22 (10:00 am - 4:00 pm).

Desert Botanical Garden - Papago Park, Phoenix. Spring plant sale, Mar. 28-29 (9:00 am - 5:00 pm).

Desert Survivors - 1022 W. 22nd Street, Tucson. Spring plant sale, April 4-5.

Arizona Sonora Desert Museum - Spring plant sale April 11 (9:00 am - 5:00 pm) & April 12 (9:00 am - 4:00 pm).

Arizona Cactus & Succulent Society (Tucson Chapter) - Show & plant sale April 17-18 at Park Mall.

OTHER EVENTS

Boyce Thompson Southwestern Arboretum - Superior, AZ. Tel. 602-689-2723. Mar. 14-31: *Wildflowers on Parade*, a display of wildflowers from central and southern Arizona on view in the Visitor Center. Arid Plant Show, April 4-11. The Two O'Clock Lecture Series continues Wednesdays through Sundays.

Permaculture Drylands, Education and Research Institute - Mar. 7: *Restoring Damaged Land*, \$45 w/lunch. Mar. 21: *Building Your Straw Bale House*, \$60 w/lunch. Mar. 23: *Permaculture Techniques for Your Home*, \$95 w/lunch. For more information write to Permaculture Drylands, P.O. Box 27371, Tucson AZ 85726-7371 or call 602-824-3465.

Taliesin West - Scottsdale, AZ. Mar. 18: *The Edible City* with Richard Britz, an architect who has established a school/farm program for elementary school children. Both lectures are a part of the Desert Nights at Taliesin West Lecture Series. Tel. 602-860-2700.

Southeastern Chapter of the Arizona Native Plant Society - Mar. 25 at 6:30 pm at the Oscar Yrun Community Center, Sierra Vista. Guest speaker, Tom Woods from Ramsey Canyon Nature Conservancy will present *Vegetation Management and Restoration of Native Plants*.

PRUNING TIPS

Robert E. Call

Extension Agent, Horticulture

The time is fast approaching when dormant pruning and training of ornamental shrubs, roses, shade trees, evergreens, fruit trees, grapes and brambles should be completed. Pruning is necessary to train, shape and correct problems of ornamental plants. Annual pruning is done to keep plant material producing young growth where production of flowers and fruit are wanted. Generally fruit is produced on at least one year old wood, (as in the case of peaches, grapes and brambles), or two-year or older wood as is the case with apples and pears. Dormant pruning is best when completed before buds swell and open. However, pruning can be done through the flowering of fruit trees although competition with honey bees may be painful. Grapes may be pruned until small leaves are present, though they will bleed which is not damaging to the plant. Brambles and roses can also be pruned when small leaves are present. Generally pruning of flowering ornamental shrubs is done when flowers are spent. Deciduous shade trees and conifers are pruned when dormant. Evergreen shrubs can be pruned during early spring.

The first rule of pruning is to remove any dead, diseased, broken, rubbing or parallel branches. A parallel branch is one directly above or below the desired branch and shades it out or is shaded its self. Also remove any root suckers, water sprouts or branches positioned low on the trunk. When making cuts do not cut through the branch collar. Cutting through the collar will cause poor healing and encourage disease (see illustrations). Generally pruning sealer or paint is not needed for most pruning cuts. In some cases, typically ornamentals, these compounds can aid in decreasing desiccation and disease, especially if large cuts are made. One example is fruitless mulberry which is susceptible to sooty canker disease.

The most critical time to train fruit trees is during the first three years from planting. The first dormant season select three to five limbs that are well spaced around the tree, with the lowest branch about two feet from the ground. This is the first whorl of scaffold branches and should also be well spaced up the tree trunk between two and four feet from the ground. Branches should be spread from the main trunk at a 50 degree angle using spreader sticks, ties or weights. This will encourage good tree structure and initiate early fruiting. When a one year old shoot is tipped more growth will occur. However, if cuts are made into 2 year old or older wood regrowth is much less. Thinning cuts are made at the base of shoots to remove them completely from a branch.

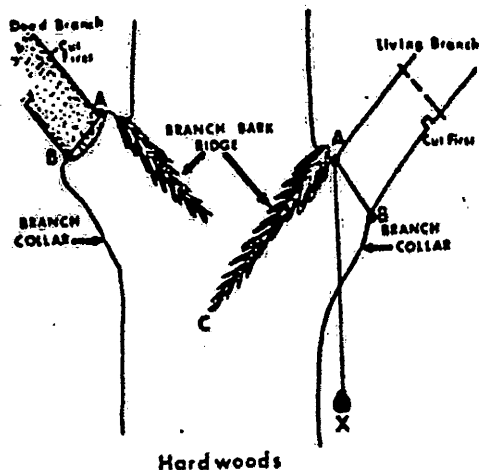
Apple trees are trained and pruned into a central leader, forming a tree that is pyramidal in shape. Peach, nectarine, sour cherry and Japanese plum are trained and pruned as an open center tree which looks like a wine glass. Pear, apricot, European plum and sweet cherry are trained and pruned as a modified central leader, which is similar to an central leader tree but the top of leader of the tree is pruned back to encourage regrowth.

Mature neglected trees that need renovating are not just a one year project but will take several years to correct. Half the wood of a peach, nectarine or Japanese plum can be removed in one year. One-third of the wood per year for apple, cherry, apricot and

European plum. Remove only one-tenth of the wood per year of pear to reduce vigorous regrowth which is susceptible to a bacterial disease called fire blight.

For further information on pruning contact the Cooperative Extension Office in Sierra Vista at 458-1104, or Willcox at 384-3594.

NATURAL TARGET PRUNING

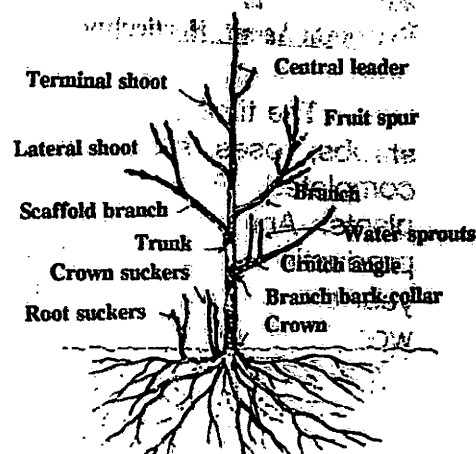


NATURAL PRUNING STEPS

1. Locate the branch bark ridge
2. Find Target A - outside of branch bark ridge
3. Find Target B - swelling where branch meets branch collar
4. If B is hard to find - drop a line at AX.
Angle XAC = to angle XAB
5. Stub branch to be pruned
6. Make cut at line AB

MASTER GARDENER OFFICE NEWS

The Master Gardener Sierra Vista Office has been partially staffed since mid-February and will be staff through November. Office hours are the same as last year, 9:00 am to 12:00 noon on week days. To maintain this schedule more volunteers are needed to staff the office. If you have a desire or your conscience convinces you to contribute to the office, please sign up on the monthly calendar at the office. Answering phone calls, researching questions and personal study are the best way to learn. Please sign up and let's make 1992 a year of growing plants and self!



U OF A SIERRA VISTA WILL BUILD A NEW CAMPUS

Robert E. Call
Extension Agent, Horticulture

Ground breaking for the new University of Arizona Extended University Campus next to Cochise Community College in Sierra Vista is slated for May 7, 1992. Construction is scheduled to be completed in early 1993. Currently fund raising is at \$530,000, with a goal of \$1.25 million. When this building is completed the Master Gardener office will move to the new facility. Cooperative Extension will also have office space in the building. This will be a great improvement from our current office space which now is cramped at best. We will also be able to construct a demonstration garden at the new site which will enhance our teaching and learning capabilities. Anyone interested in contributing in any form to this building project is invited to do so. For further information, contact Dr. Randy Groth at 458-8275 or the Sierra Vista Campus located at 2500 E. Fry Blvd.

1991 MASTER GARDENER NEWSLETTER ABRIDGED INDEX

ALLERGIES					
Calendar for	May	A New Class Begins	Feb		
ARIZONA NATIVE PLANT SOCIETY		Congratulations MG Volunteers	Jul		
Arizona Native Plant Society	Oct	First Spring MG Class	Mar		
SV Chapter of ANPS Forms	Nov	Master Gardener Conference	Sep		
BOOKSHELF: HIGH DESERT		1992 State MG Tour de Yuma	Dec		
GARDENER'S		Phoenix in August	Aug		
<i>Sunset New Western Garden Book</i>	Mar	Rose V. Land: Woman of the Year	Oct		
For the Southwestern Climate	Apr	PLANT OF THE MONTH			
Rodale's Garden Problem Solvers	Jul	<i>Acacia farnesiana</i>	Feb		
Wildflower Books	May	<i>Acacia smallii</i>	Feb		
BUZZWORDS		<i>Albizia julibrissin</i> - Mimosa	Sep		
Cutting 'n' Clippings	Jun	<i>Celtis pallida</i>	Jun		
CACTUS		<i>Celtis reticulata</i>	Jun		
Saving Arizona Cactus	Oct	Desert Hackberry			
CLASSES & COURSES		<i>Cupressus glabra</i> - AZ Cypress	Oct		
U of A	Mar	<i>Gaillardia grandiflora</i>	Aug		
Cochise College	Feb	<i>Hesperaloe parviflora</i>	Mar		
COCHISE GLOBAL ReLEAF		<i>Lagerstroemia</i> - Crape Myrtle	Dec		
Cochise Global ReLeaf	Jul/Nov	<i>Pistacia chinensis</i>	Nov		
COMPANION PLANTING		Chinese Pistache			
Best of Friends: Brief Guide to	Jun	<i>Umbellularia californica</i>	Apr		
COOPERATIVE EXTENSION		California Laurel			
How State Govt Runs?	Sep	<i>Vauquelinia californica</i>	Jul		
It's July 1: Where's the New Agent?	Jul	Arizona Rosewood			
More Videotapes Available	Nov	<i>Zephyranthes</i> - Desert Crocus	May		
New Ag Agent Arrives	Aug	POISONOUS PLANTS			
New Agent in the Office	Sep	Common Poisonous Plants	Nov		
News From the Front Office	Apr	PRUNING			
Videotapes Available	Nov	Winter Pruning	Feb		
ENVIRONMENT		RECYCLING			
Earth Day	Apr	Cochise County Recyclers	Jan		
Toxic Trash	Apr	Facts About Recycling	Jan		
FERTILIZER		Recycling As An Attitude	Jan		
Consumption	May	Recycling in Your Garden	Jan		
GARDEN TOUR		Recycling Update	Jun		
GOURDS		Recycling With Kids	Jan		
INDEX		Shredded Newspaper	Oct		
1990 MG Newsletter Index	Feb	Sources of Recycled Paper	Jan		
INSECTS & PESTS		What We Throw Away	Jan		
Ants in Your Pants	Nov	REMINDERS (MONTHLY)			
Ecologically Sane Pest Control 1	Feb	RIPARIAN CONFERENCE	Sep		
Ecologically Sane Pest Control 2	Mar	SEEDS & SEEDLINGS			
Ecologically Sane Pest Control 3	Apr	Low Germination Indoors	Apr		
Ecologically Sane Pest Control 4	May	Seedling Droop	Apr		
Ecologically Sane Pest Control 5	Jun	SOUTHWEST STYLE			
Ecologically Sane Pest Control 6	Jul	Southwest Style (Christmas)	Dec		
Ecologically Sane Pest Control 7	Aug	TREES			
Harlequin Bug	Oct	Living Christmas Trees	Dec		
Ladybird Beetle (ladybug)	Dec	VEGETABLES & VEGETABLE GARDENS			
Mulberry Caterpillar	Sep	Brief History of the Love Apple	Oct		
Praying Mantids	Oct	Enjoying Cool Season Crops	Aug		
Spiders	Nov	WATER			
Spined Soldier Bug	Sep	Management, California	Jun		
Stinkbug	Sep	WILDFLOWERS			
Whiteflies in Your Garden	Dec	Arizona Blue Eyes	Sep		
MASTER GARDENER PROGRAM		Planting A Wildflower Garden	Oct		
		Wildflower Watch: Locoweed	May		

But oh, beamish nephew, beware of the day,
If your Snark be a Boojum! For then
You will softly and suddenly vanish away,
And never be heard from again!

- Lewis Carroll from *The Hunting of the Snark*

IF A SNARK BE A BOOJUM BEWARE

Barbara Shelor
Staff Writer

One of the more interesting plants you might purchase this spring for an indoor succulent collection is a boojum. I recently got one at the Desert Botanical Gardens in Phoenix. I have wanted on for some time for there is no other species quite like it.

The boojum, *Idria columnaris*, only occurs naturally in one place in the world, the Sonoran Desert in Mexico. It appears in two places: the Central Desert of Baja California and across the Gulf of California in the state of Sonora, in an area called Sierra Bacha, a small mountain range. Before being called boojum, it was known by the Cochimi Indians as milapa and by the Jesuits as cirio, because it suggested a candle taper.

It was Godfrey Sykes, born and educated in England, who is credited with giving the *Idria columnaris* the common name used for it today. According to Mr. Sykes' son, Glenton, his father was with a group from the Desert Botanical Laboratory of Tucson. The group was, "standing on an elevated area some distance north of the mountainous area of Sonora where *Idria* had been reported. Godfrey, looking through his telescope and suddenly perceiving the unusual trees, exclaimed, 'Ho, ho, a boojum, definitely a boojum!'"* The name persists.

Travelers will first sight the boojum a few miles south of El Rosario, about 200 miles south of the border, going from Tijuana or Mexicali. The *Idria* is a succulent which can live for hundreds of

years and reach extreme heights. It may be the tallest plant in the Sonoran Desert. Its "skeleton" is similar to the saguaro (*Carnegiea gigantea*) and the cardon (*Pachycereus pringlei*).

Since it is able to endure extreme wind velocities, its shape is often contorted; thus, the boojum appears naturally as one of the most bizarre plants in the world. It is described by some as primitive and by others as grotesque. But do not allow these descriptions to mislead. The small plants available at plant sales in Arizona have a "stumpy" stem with delicate, light branches, with small leafy foliage, growing in a crown from the top. These slender branches can exceed the central stem length by several times.

For more information about the boojum, consult *The Boojum and Its Home* by Robert R. Humphrey*. It is available at the Sierra Vista Public Library.

WILDFLOWER HOT-LINE

For up-to-date information on what wildflowers are blooming throughout the state, call The Desert Botanical Garden, Phoenix, hot-line at 602-481-8134 (it is not toll-free). The hot-line will be updated weekly on Fridays. It looks like a good year for wildflower viewing!

Staff:

Carolyn Gruenhagen
T.J. Martin
Elizabeth Riordon
Barbara Shelor
Peter Whitman

Articles to be published in next month's newsletter must be received at the Sierra Vista Cooperative Extension Office by March 25.

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 handicapping condition.

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WHAT'S BUGGING YOU?® by T.J. Martin

PREPARATION FOR SPRING

Just like the children at Christmas time, now is the time of year that area gardeners like to lay snug in their beds, with visions of goodies dancing in their heads. But unlike the kids, our visions are not of sugarplums, but of mail order gardening catalogs, seed packets, bare root trees, veggie transplants, etc...

In our area, now is a good time to put out those cold-weather crops (peas, broccoli, cabbage, kale, brussels sprouts, etc.) as long as you are prepared with some sort of protection if we happen to get another really hard frost or freeze. And, not to throw cold water on anyone's sugar-coated gardening dreams, but now is also the time to think about all those little critters that inevitably show up to help you eat the results of that little garden.

In gardening, as in many of life's endeavors, one of the secrets of success is PREVENTION. Never underestimate the powers of hard work, timing, fertile soil, viable seeds, luck, etc., but a little forethought and a few preventive measures early in the season can make a BIG difference in how much work and hassle is involved during the main growing season. Here is a reminder of some of the preventive measures that you can take now to help keep YOUR garden's supply of undesirable creepy crawlies to a minimum.

TILL THE SOIL - Try to dig down at least 6-12 inches and turn the soil over well. This will expose many overwintering insects to the cold weather and drying winds as well as make them accessible to birds, spiders, lizards, and other natural predators. You can also hand pick any pupae, egg cases, etc. that you find while digging.

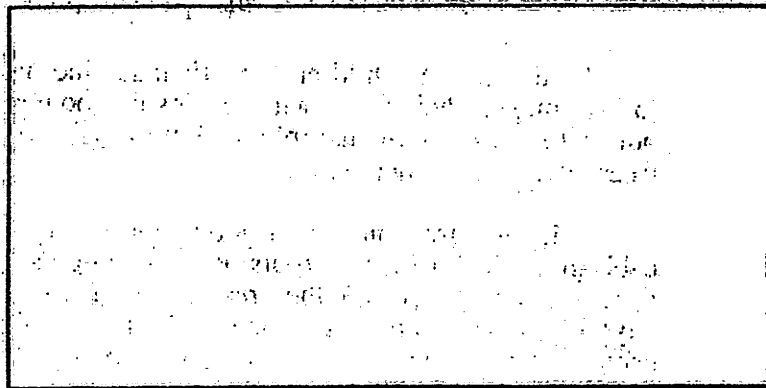
USE ROW COVERS - Try covering your early seedlings with agricultural fleece to keep pests away. If the cabbageworm butterfly cannot get to your plants to lay the eggs, then there should not be any of the caterpillars munching on your leaves later on. Be sure to anchor the edges well and cover them with a thick layer of soil to keep the crawling pests out also. One note of caution: some brands of fleece hold in heat as well as they keep out the bugs. In this area, that could mean cooked veggies right there in your garden patch. Keep an eye on the temperature and vent the covers on warm days. Make extra sure that your crop is well watered to help prevent moisture stress. On the plus side; this very heat retention capability will help protect your plants in the event of a borderline cold snap.

WASH YOUR TREES - Using an insecticidal soap (or just plain Ivory soap and water) scrub down the bark of your trees using a stiff brush. This will dislodge many overwintering pests that are hiding in the bark crevices. You can spread a light colored cloth on the ground around the tree and the insects should be readily visible when they drop on it. Some folks just let the critters lay where they fall and hope that they will die of exposure or be preyed upon. Personally, I would rather get rid of them myself once and for all. Using a hard spray of plain water will often work to dislodge pests, too.

USE A DORMANT OIL - This extra fine oil is sprayed on the bark and limbs of trees to smother any overwintering pests that may be in residence. Make sure that you don't get any on developing buds or emerging leaves as this may cause them to drop off. There are a couple of agricultural oils that claim not to harm emerging growth, but since I have never tried them, I cannot recommend any of them. If YOU try one, please let me know how it worked so I can pass on the information.

WRAP YOUR TREES - To keep certain larvae from crawling up your trees to feed, wrap a layer of corrugated cardboard, burlap, or some other batting-type material around the trunk of the tree and secure. Either make it very tight at the top edge or add a line of sticky stuff (petroleum jelly, Tanglefoot, etc.) to catch "escapees". The crawlers will be caught in the batting and you can destroy them when you check the batting. This method can also work in the

Address correction requested



fall when critters are crawling up to overwintering spots.

SET YOUR TRAPS - It's time to purchase your pheromone or baited traps in anticipation of pests' arrival (Codling Moth, etc.). At the proper time, hang these traps in your trees to attract and catch the first arrivals. You can use these to decrease the critter population by catching as many as possible, or they may be used as early warning systems to alert you as to the proper times for spraying properly selected insecticides.

PLAN FOR COMPANIONSHIP - Many garden plant varieties reportedly work together by either enhancing each other's growth or by repelling pests that commonly affect the other. Onions, garlic, and peppers are favorites in this game. Other combinations include tomatoes and basil, corn and beans, and mint and cabbage. Many of the strong herbs and spices can be used in this manner.

ENCOURAGE NATURAL PREDATORS - Include in your plans the ordering of ladybugs, lacewings, and others if you plan on supplementing local populations. Plant flowering plants to provide food and shelter for natural helpers and the presence of a birdbath will generally encourage our feathered friends to "stop by and have dinner" on your garden pests.

Other items to consider during your planning stage include rotation of crops, mulching, planting of resistant, tolerant and adapted varieties, proper timing, and required watering and feeding schedules. There is too much to cover in this one article, but the Cooperative Extension Service has a wealth of information available at either the Willcox or Sierra Vista offices. I suggest a copy of the paper *Ecologically Sane Pest Control*, one of my previously published *What's Bugging You* columns on your particular problem pest or one of the other available handouts. Just call (458-1104 or 458-UASV in Sierra Vista or 384-3594 in Willcox) or stop by the office and we should be able to provide you with just the information you require.

HAPPY GARDENING!