High on the Desert Cochise County Master Gardener Newsletter

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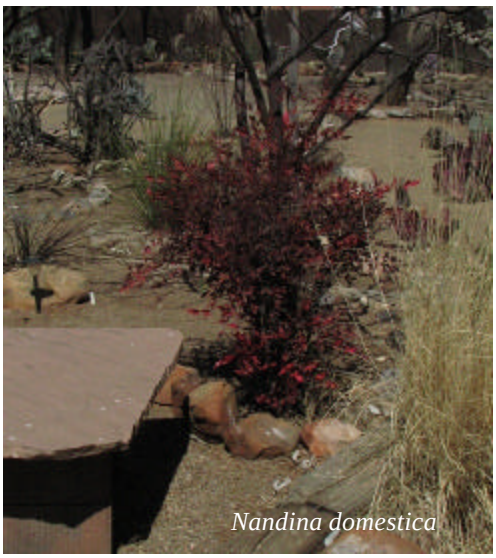
The University of Arizona and U.S. Department of Agriculture Cooperating

The Virtual Gardener—Bright Spots

As I survey the damage in my yard left by the disastrous freeze in February, I see several bright spots—the brilliant red leaves of *Nandina domestica* (Heavenly Bamboo), a plant that not only survived the cold snap but looks even better for it. The red leaves glow in the backlight of the late afternoon sun.

The common name, Heavenly Bamboo, however, is a misnomer. Although the leaves have a passing resemblance to some varieties of bamboo, the plant is actually a member of the Barberry family (*Berberidacae*). *Domestica* is the only species of the genus *Nandina.* Heavenly Bamboo is native to Japan and China where it has been used as an ornamental plant for centuries. According to **Wikipedia**, it was first brought to the Kew Gardens England in 1814 by plant explorer William Kerr.



Nandina domestica

Heavenly Bamboo is a tough plant that reportedly can be grown in USDA Zones 4-10, surviving temperatures from 110°F to 10°F. Tell that to the nandinas in my yard! They easily survived 3°F in February. Besides temperature extremes, plants grown in the High Desert also have to survive the arid conditions, intense sunlight, and alkaline soils of our area. The nandinas pass these tests as well. I seldom have to provide them with additional water.

In addition to their toughness, these plants make beautiful additions to the landscape. Mine are mostly varieties that are compact and are three to four feet high, although I have one plant that is close to 10 feet tall. They

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Cochise County Cooperative Extension

www.ag.arizona.edu/cochise/mg/

1140 N. Colombo, Sierra Vista, AZ 85635
(520) 458-8278, Ext. 2141

450 S. Haskell, Willcox, AZ 85643
(520) 384-3594

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provide year-round color with green leaves in the summer and red leaves all winter. The small red berries that appear in the fall and winter are an extra bonus. The delicate lance-shaped leaves provide an interesting textural contrast to desert natives.

Nandina domestica is listed as a poisonous plant. The **Cooperative Extension of North Carolina State University** lists the berries as having low toxicity if ingested and Wikipedia reports that all parts of the plant are fatally toxic if ingested. Whichever the case, I would not recommend munching on your plants.

Some people **complain** that nandinas are invasive and difficult to remove, but I suspect this is only the case if they are grown in rich soils with lots of water. The ones growing in my yard are imprisoned in small planting holes chiseled into rock-hard alkaline soil and have not yet figured out how to escape.

If you're looking for an attractive and hardy plant that will survive the next "hundred-year" cold snap, consider a Heavenly Bamboo.

Until next time, happy surfing.

Gary A. Gruenhagen, Master Gardener
virtualgardener@cox.net

Robert E. Call
Area Horticulture Educator

Carolyn Gruenhagen
Editor

Cuttings 'N' Clippings

❄ The next CCMGA meeting is 5:00 p.m. Thursday, **April 7** at the University of Arizona South Campus Public Meeting Room. The speaker will be Rebecca Hillebrand.

❄ *April is Water Awareness Month!*

WORKSHOP

April 15 & 16: Passive Stormwater Harvesting and Erosion Control Workshop for Small Acreage Homeowners. Registration is required

If stormwater erodes your property and you would like to learn how to harvest it to benefit your property, this hands-on workshop will show you how.

Friday, April 15th Classroom Session: 6:00—8:30 p.m. in Palominas, AZ

Saturday, April 16th: 8:00 a.m. –2:00 p.m. Hands-on building session at a private rural residence in Sierra Vista.

Presenters: Tom Runyon, Ft. Huachuca Hydrologist; Karen Riggs, P.E. County Engineer, Cochise County; Kim McReynolds, Cochise County Cooperative Extension Natural Resources Agent; Art Meen, Resource Planner, Natural Resources Conservation Service.

Registration is $15 (includes lunch) and the class is limited to 30 participants. To register, please contact Gail Lanham at **herefordnrcd@juno.com** or call 520-220-2028.

Co-Sponsors: Hereford Natural Resource Conservation District and the University of Arizona Cochise County Cooperative Extension Water Wise Program.

❄ The newly formed Cochise Chapter of the Arizona Native Plant Society meets the second Thursday of the month, 5:00 p.m. at the Sierra Vista Library. For information contact Pat Anderson at **patanderson3@juno.com**

❄ On Saturday, **April 23** the Cochise Master Gardeners will be participating in Sierra Vista's Earth Day celebration at the Farmers Market located on the NW corner of Carmichael and Wilcox. The event runs from 9:00 a.m. to 2:00 p.m. Stop by with a question, for information, or just to say "Hi!"

❄ May Xeriscape Garden Tour

Cancelled due to dry winter.

Master Gardener

Of Lice and Men—(with apologies to John Steinbeck)

The March 21, 2011 issue of *Time* magazine contained an interesting article about head lice. The article discussed the fact that the most effective weapons we've had against lice, insecticidal shampoos like Rid and Nix, are no longer effective at killing the little buggers. It seems lice have developed a resistance to the shampoos.

Coincidentally, the speaker at the March Master Gardener meeting was Mr. Peter Warren, Pima County Urban Horticultural Agent, who spoke about garden pests and their increasing resistance to the compounds we use to control them. Among the interesting facts in his presentation: Over 500 insect species are resistant to at least one formulation of insecticide and 17 species are resistant to all major classes of insecticides, while 150 fungi are resistant to nearly all systemic fungicides and resistance to herbicides has been documented in over 100 weed biotypes.

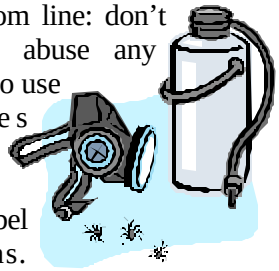
Here's the thing: all life forms, from bacteria to insects, from tulips to humans, evolve and, eventually, a species can become immune to many things that were deadly to its ancestors. We're all aware of increasing immunity of human pathogens to antibiotics. Widespread use of pesticides, both herbicides and insecticides, eventually breeds plants and critters that aren't affected by those pesticides. Furthermore, indiscriminate use of pesticides speeds up that process. Resistance of plants and insects to pesticides is happening now in our gardens, homes and farms.

Many home owners and gardeners are unaware that it is a violation of federal law to use a pesticide other than in accordance with the label instructions. This means it is against the law to mix pesticides at other than the recommended strength (twice as strong isn't better, but it is illegal) or to spray aphids with a compound recommended for spiders only. I've actually heard a person admit to using a herbicide on insects because they had no insecticide around and, what the heck, they're all poisons! Indiscriminate, off-label use of pesticides accelerates pest resistance to them and is against the law to boot. Too, many folks assume that any insect is bad. Most insects species are actually not harmful and some even eat the species that are harmful. Be sure you know what you're killing, and why, before using any pesticide.

"...follow label instructions carefully."

Some people are just irrationally fearful of any insect. I've observed people poisoning an ant hill in a neighborhood common area, beyond their own property line. That's just plain silly. First, the chance of the next ant hill being closer to your house has just increased. Second, for the most part, ants are beneficial and don't usually pose any harm to humans. If you've got ants coming into your house or ruining picnics on the patio, get an insecticide intended for ants and use it in accordance with label instructions. If the ant hill is out in the back forty, or across the street, leave it alone.

On a related note, the *Time* article on lice included the following statement: "...active ingredient, spinosad, is so safe that it's approved for use on organic crops." Whoops! It's a big mistake, and one that many folks make, to assume that organic means harmless. Arsenic and cyanide are organic in the context of being natural, but they're lethal to most living creatures. Many commonly used organic pesticides can be dangerous to humans and wildlife, especially if misused. Among them are rotenone and pyrethrum. Conversely, some synthetic pesticides are relatively safe. Don't get me wrong, I prefer organic pesticides myself. Just remember, they are still poisons. Just as with so-called chemicals, treat organic pesticides with respect and follow label instructions carefully. Note, too, that pests develop resistance to organic compounds just as easily as they do to man-made formulations.



The bottom line: don't overuse or abuse any pesticide. Do use pesticides only in accordance with label instructions. Avoid using any pesticide for minor problems. Be sure the pest you're seeing is really a pest and present in enough numbers to pose a problem. Instead of spraying the few tomato horn worms you see, hand pick them off the plant and step on them, or feed them to the birds. If there are a couple of weeds poking up through the cracks in your driveway, pull the darn things, don't break out an herbicide and soak your entire lot with it. Use common sense. Be sure you have a real problem before breaking out the sprays.

Bill Schulze, Master Gardener

Attracting Butterflies and Moths to Your Garden

Butterfly and moth attracting is a topic about which books have been written. This article is more on the order (no pun intended) of how I do my garden, and what I have observed over time.

There are the obvious butterfly attractants, which most people know, such as *Buddleia davidii*, whose common name is Butterfly Bush. This large and showy shrub attracts a number of what I think of as generalist butterflies, including swallowtails, (black swallowtail, giant swallowtail, pipevine swallowtail, two-tailed swallowtail), queens, painted ladies, frittilaries, and monarchs. There are less used *Buddleias*, such as *B. alternifolia*, which also attract butterflies. As I write this, my *B.alternifolia* has queens, skippers and cabbage butterflies. Generalists are also attracted to *Caryopteris*, which has the added advantage of being unpalatable to deer, *Agastache*, *Echinacea*, Russian sage, rock-roses, *Gaura lindheimeri* (whose flowers resemble butterflies) and salvias, to name just a few. All of these plants are drought tolerant and do well in our climate.

April Reminders

- *Stake new trees*
- *Fertilize*
- *Prepare for pests*

Salvia, which is a huge genus, is attractive not only to butterflies, but to hummingbirds and sphinx moths, who also feed on its nectar. The larval stage, caterpillars, are uninterested in *Salvias*, but love Virginia creeper. In the late summer, they can decimate a plant. I used to pick them off, but being both squeamish and fond of sphinx moths, I no longer do. Also, by the time the plants have been attacked by the caterpillars, it is so close to the end of the summer, I just think give it up. I used to grow dill, which is another favorite plant of the sphinxes.

Obligate relationships between moths and host plants are known. There is an obligate pollination relationship between yuccas and yucca moths, of which many people are aware. I have a large shrub in my yard, whose name I never knew until a moth expert came to the house, and identified a moth as a *Monostoecha semipectinata*. It turns out this is an obligate of *Garrya elliptica*, the previously unidentified shrub. This is a Cochise County native plant, whose common name is silk tassel tree.

A plant of which a number of butterflies are particularly fond is *Eupatorium*, or Joe Pye weed. I don't know the species name. I bought the plant many years ago from High Country Gardens, but they no longer carry it. It is a perennial about 18-24" tall with blue flowers. While not particularly showy, the flowers bloom in the late summer and early fall when other plants are starting to poop out. I planted it on one side of a walkway, and within a few years it had jumped the walkway and reseeded on the opposite side. The plants attract myriad butterflies, such as skippers, marine blues, Mexican sulphurs, and several species of *Euremas*, including *E. mexicanum*, *E. proterpia* and *E. necippe*. For several weeks in late summer, there are so many butterflies that clouds of blue, white, orange and yellow butterflies rise up when someone uses the walkway. These are planted next to a large shrub, *Anisacanthus quadrifidus*, which is also a late bloomer and attractive to butterflies.

This is not intended to be an exhaustive list of plants attractive to butterflies and moths, but rather a meditation on unintended but serendipitous consequences. When we planted the yard, we planted trees, shrubs and perennials we liked. The butterflies and moths came, and now I think of them as the flowers of the animal kingdom. Their presence adds immeasurably to the enjoyment and beauty of a yard.

Susan Mathews, Master Gardener

The Agent's Observations

Q I just dug up a peach tree killed by peach tree borers. Is there something I should do before replanting? I would like to keep a peach tree in the same general location. Also, some of our 25 year old apple trees have the bark peeling off of the branches. What is causing this and what can be done about it?

A If the tree was killed by peach tree borers and it has been removed, I would not plant a peach tree in the same location. As peach tree roots decompose, cyanide and other compounds are released, and the newly planted tree roots will be damaged and might even die. This is known as peach tree replant disease. Dr. Harold Larson at Colorado State University clearly demonstrated the effect of planting peaches after peaches.

Peeling bark on fruit trees may be caused by southwest winter injury. This results because the winter sun is lower in the horizon striking the trunks. This causes heating of the tree trunks during the day. At night the tree trunks lose heat to the cool air, causing contraction. This expansion and contraction causes cracking over time on the south-southwest side of trees. This phenomena is most pronounced with young trees because they do not have much mass. As tree trunks are over five inches in diameter the injury is much less. To help avoid this, paint trunks with white latex paint to reflect the sunlight. The cheaper the latex paint the better. "Official" tree paint is not needed.

Apples and pear trees, especially neglected trees, support the growth of wooly apple aphid (*Erisoma lanigerum*) or wooly pear aphid (*Erisoma pyricola*). These aphids live on tree roots, but in the spring adults will emerge and mate in the tree canopy. Their feeding activity causes galling of roots. The galls cause roots to be inefficient in moving water and nutrients to support the top growth of the tree. (See the photo of affected roots below.) Over time the branches lose their bark, leaves are small and the tree is just not healthy. There is no treatment for the wooly aphids.

Q Now that spring is here we want to take better care of our small Bermudagrass lawn. We have weeds in the grass. What can we do to get rid of them and make sure they do not return?

A Decide your tolerance for weeds. If you don't mind a few weeds in your lawn, you may not need to remove them or use an herbicide at all. Mow regularly at the correct height and maintain a dense, healthy stand of grass to keep weeds in check. Just make sure you don't allow any weeds that remain to go to seed and spread. Also keep an eye out for perennial grassy or broadleaf weeds that can continue to flourish with mowing and will need to be controlled. Identify the culprits. Do you know what kind of weeds typically grow in your lawn? It is important information that can help you determine which "weed and feed" product to purchase. Crabgrass grows differently from dandelions, for example, so different herbicides are needed to control it. There are many resources you can turn to for help. For example Kitty Parker's book *Weeds of Arizona* is available at: **http://www.uapress.arizona.edu/onlinebks/weeds/titlweed.htm**
Identify your turfgrass. Cool-season turf species, such as tall fescue, Kentucky bluegrass and perennial ryegrass, should be fertilized primarily in the fall and early spring. Warm-season grasses like Bermudagrass should be fertilized during spring and

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Tohono Chul Park

Cochise County Master Gardeners enjoyed a behind the scenes tour of Tohono Chul Park in Tucson with Curator of Plants, Russ Buhrow on Saturday, March 26. The penstemons were in full bloom—it was a beautiful day in the park!

Did You Know . . .

The University of Arizona South Botanical Garden map and plant list can now be found on the Web site. Click here.
Brochures are also available in the Cooperative Extension office on the UAS Campus.

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summer. If the right time to fertilize your lawn is not the right time to control your weeds, don't apply a "weed and feed" product. Understand preemergence and postemergence herbicides. Crabgrass preventers must be applied before the weeds emerge. Most of the herbicides used for broadleaf weed control are applied after the weeds have emerged. These broadleaf products should generally be applied when there is dew on the weed foliage, allowing the granules to stick and release their herbicide. Measure and apply precisely. More is not better. To control your weeds, use the exact application rate specified on the label, at the recommended time of year or growth stage. Read the entire label. Always do this first, even before you purchase the product. The label is the law, and you are legally obligated to read and follow everything that's on it. The directions for use, precautions and other information are equally important. Measure the area of the lawn to be treated and use a scale to measure the precise amount of product needed. You will waste money and may injure your lawn if you apply the wrong rate at the wrong time. Also avoid nearby ornamental landscape plants to protect them from potential damage. Sweep it up. Sweep or blow any "weed and feed" granules that fall on your driveway or sidewalk back onto the lawn. If you don't, they can easily travel with rainfall into storm drains, ditches, creeks and other waterways. The same advice applies to any granular pesticide or fertilizer applied on lawns, around ornamentals or in gardens. Keep them precisely on target. Have a backup plan. Weeds already growing in your lawn won't be controlled by a preemergence-type "weed and feed" product designed to keep weed seedlings from emerging. In addition, perennial weeds with creeping root systems, rhizomes or tubers pose a special challenge; you may need to spot spray them with a different herbicide at very specific times. Consult the Cooperative Extension Office for recommendations. Practice prevention. A thick, healthy lawn will outcompete weeds and can be less susceptible to disease and insect attack. Maintain optimum growth with proper use of fertilizers, regular mowing and timely irrigation. If your neighbor borrows your mower, clean it well before and after to keep from spreading weed seeds from lawn to lawn. Finally, take a close look at your lawn regularly so you can pull or hoe small weed outbreaks before they get out of hand.

Source:
http://turf.arizona.edu/tips294.html

Robert E. Call
Area Horticulture Educator