THORNY BUSH

Newsletter of The Huntington Rose Society; Huntington, WV

Affiliated with the American Rose Society

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Dates to Remember

November 15, 2011 The annual rose banquet and installation of officers will be held on Tuesday, November 15, 2011 beginning at **6:30 P.M** at the Central Christian Church, 1202 Fifth Avenue. **WE ARE ALSO SPONSORING A FOOD DRIVE FOR THE COMMUNITY AND ASK EVERYONE TO BRING 4 CANS OF FOOD, CEREAL OR PASTA.** Further information is provided in this newsletter.

In this Issue

President's Message
Bill Dolen

I have just returned from the Ritter Park Rose Garden, where Rudy Wang and I helped cut rose cuttings for the public today. The turn out was down from the last few years. Things went well, and some very nice people came to get cuttings. They were all very easy to work with.

The garden has improved, but there is still room for improvement. They are going to start putting on winter protection for the roses tomorrow. I believe the roses will get a better start next year. I also hope they realize what a good job Thurman did while he was there. He will be hard to replace.

Our annul dinner will be November 15 at 6.30 pm. The society will provide ham and turkey and drinks. Members should bring cover dishes, as we need vegetables and desserts. I received a note from John Fleek that he will bring the ARS calendars to our dinner, cost is $9.75 per calendar.

Time has come to winterize our roses. We should remove all leaves from the roses and clean all leaves from the beds.

I hope the coming year will be a better year for growing roses. I missed not being able compete in a show this year. It was one of the few times that has happened since I began exhibiting.

I am looking forward to next year.

NOMINATING COMMITTEE
2012 Slate of Officers

The committee has announced a slate of officers for 2012. The names of the candidates will be read and voted upon at the November 15th banquet. The elected officers will then be installed at the Banquet. Don't miss this important activity of the Huntington Rose Society!!!

The candidates are:
President- Bill Dolen
Vice President- Monica Valentovic
Treasurer - Gary Rankin
Assistant Treasurer- Rudy Wang
Recording Secretary- Beverly Delidow
Corresponding Secretary- Cheryl Johnson

☞2012 ROSE SOCIETY DUES☜

It is time to renew your membership for 2012. Membership dues remain at $8 for individual and $12 for a family membership. The renewal form is on pg 6 of this newsletter. Send your dues to: Gary Rankin, Treasurer, 109 Cedar Court, Lavalette, WV 25535. Dues can also be paid at banquet.

The Society is also seeking additional donors to help defray the yearly costs incurred by the Society. The levels of donation are denoted as: Queen, King, Princess and Prince levels. Donations at the Prince ($1-25); Princess ($26-50), King ($51-99) and Queen ($100 or more) levels will be acknowledged in our newsletter. Remember that our rose society is a 501 C-3 non-profit organization and any donations are tax deductible.

SOCIETY FOOD DRIVE

This year the executive committee decided to have a food drive as a community project. Food banks in our area are depleted due to diminished donations and increased number of requests. We ask everyone who is able to bring 4 or more canned food items, pasta, cereal or other non-perishable items to the BANQUET. For each 4 items you will receive an extra door prize ticket. The society will then donate these items to one of the local food banks (Huntington Area Food bank, City mission or one of the church food banks). I hope everyone can participate in this project which will benefit families in our community.

November Banquet

The annual Huntington Rose Society banquet will begin at 6:30 PM, November 15, 2011 at the Fellowship Hall 1202 Fifth AVE, Central Christian Church, Huntington, WV. The banquet will be potluck. The Society will provide **turkey, cups, plates, silverware, soft drinks and coffee.** This is a great time to bring your favorite recipe to share with your fellow rose growers.

Following the dinner, President Bill Dolen will open the floor for additional nominations for officers, followed by the election of officers for 2012. The officers will then be installed by Colonial District Director John Fleek. We hope you can plan to attend the banquet. It is the last time we meet as a group in 2012. We can guarantee lots of good food, some excellent door prizes and the fellowship of great people that are interested in having a good time. Hope you can make it!

Cooking With Rose Hips

Mary Peterson

When a rose flower is fertilized with pollen, either from another rose by the wind, insect, or bee, the result is the formation of a hip or rose fruit. Inside this hip are the seeds that carry the genetic mix from both parents and if germinated it will produce a completely new rose variety.

Toward the end of the season in colder climates, you will want to leave these hips on your roses to send the message to the plant that it is time to rest and go dormant. You can clean up your plants by removing any of the dead petals, but leave the hips in place to send this signal to the plant.

Many of the wild roses with a very short bloom period more than make up for this with lovely hips. Hips can fall into one of approximately 10 shape categories. The shapes include blobose, pear-shaped, obovate, rose-shaped, ellipsoid, spindle-shaped and flask-shaped. They also vary by colors and sizes along with textures and armaments such

as bristles or prickles. Some may be black, while others are orange and shapes vary in size and can resemble polished hard shells. Most hips are in the red category. They can range in size from very small, either singles or clusters, to very large resembling crab apples or cherry tomatoes.

In recurrent roses, hips are not particularly desirable as they drain the plant's energy and prevent subsequent flowering. This is why rosarians 'dead-head' these varieties to encourage subsequent flowering. Many cultivars are sterile, so cannot set fruit; when they ripen, the flower-stalks turn yellow and drop. This can be a desirable feature of a rose since the faded petals will drop cleanly from the plant. There are exceptions as with the Rugosas. R. *rugosa* is a repeat-flowering rose and can produce green hips, red hips and flowers on one shrub at the same time. In some rose varieties the hips are more decorative than the flowers and this ornamental feature is much prized by rose growers.

Even before 1939,rose hips were investigated for their vitamin content. Ancient cultures knew of the therapeutic effects of roses and they were frequently used in mendicants for a variety of ailments. In some varieties, the hips can contain more than four times the amount of Vitamin C as apples. The quantities of vitamin present in each species are very variable and tend to be higher in cool climates than in warmer ones. For example, most apples contain approximately 50 mg of Ascorbic Acid /.002 oz. *R. haematodes* has 29,000 mg /.01oz,*R. sweginzowii macrocarpa* has 1,100 mg./.04oz and *R. rugosa regeliana* has 940 mg./ .03 oz., while *R. moyesii* has 850 mg/.03oz. During WWII, the cultivation of roses for this purpose was encouraged, not only in Germany but also in England.

The use of roses as a source of Vitamin C has declined more recently because some of the varieties that provided large amounts of Ascorbic Acid are no longer commonly grown.

Fresh hips from *R. canina* were used as a diuretic, as a coolant, and a mild astringent. Both leaves and hips were used for infusions or tea. The hips from *R. pomifera* were made into preserves and also into a drink. It was very popular in certain areas of Austria and Bavaria. *R. roxburghii* hips were used by the Chinese to aid against indigestion and the Ainu in Japan ate the hips of *R. rugosa*. Always be sure that any rose material that you will consume has not been sprayed with any systemic or pesticide that has become part of the hip or petals.

Reprinted from the American Rose Society website; www.ars.org.

Here Comes Winter
Don Julien

We have a tendency to baby our roses, and sometimes we forget that Mother Nature has her own processes for preparing for winter, in spite of all the preparations we may feel we have to make. The purpose of this article is not to give you pointers on what to do, but rather to give you a better picture of what your roses are already doing for you.

A Bit of Botany

First, a little botany background. During the growing season, leaves are actively converting water and carbon dioxide to carbohydrates through photosynthesis. These carbohydrates are the building blocks for all other structures in the plant, whether they simply combine with each other to form sugars, or whether they combine with other nutrients to form hormones, cell walls, nuclei, whatever. The plant's vascular system ,a series of tube-like cells, moves the carbohydrates, diluted in water, to various parts of the plant, where they are incorporated into the processes occurring there, whether it be new growth, flowering, or root development.

Of all the different chemicals manufactured by the plant out of these carbohydrates, hormones are the ones that direct and regulate activity in the plant. These hormones include auxins, gibberellins, abscisic acid, ethylene, and cytokinins. Some of these hormones

accelerate growth, some discourage it. For now, it is enough to understand that the plant manufactures different amounts of these hormones, depending on certain environmental signals, and the change in hormone balance triggers changes in plant processes.

The Effect of Fall

In the fall, a number of conditions set off changes within plants that slow growth. Decreasing temperatures and shortening day-length (or increasing night-length) are two major conditions that start these changes, although reductions in water and nitrogen will also stimulate changes. These events trigger the production of abscisic acid, which is a general growth inhibitor. Abscisic acid also affects the stomatal guard cells; an increase in production causes guard cells to collapse and close the stomata, slowing the expiration of water. Times of drought tend to stimulate production of abscisic acid, reducing expiration and increasing root development. (That's why we recommend stopping supplementary watering in the fall; it helps trigger the production of abscisic acid. And since abscisic acid also promotes root growth, we recommend moving or planting dormant bushes in the fall.)

In roses, as in other woody, deciduous plants, the carbohydrates produced in photosynthesis are no longer needed for growth, so they begin to move from the leaves to the canes, usually in the form of sugars, leaving behind various waste products. Ethylene and abscisic acid (at least so some scientists believe) then affect a section of specialized cells at the point where the leaf attaches to the cane.

These cells are sensitive to the hormones, and as the concentration grows, the walls of the cells disintegrate, releasing the leaf, and leaving behind a protective layer on the plant where the leaf was attached. (This same process causes petal drop; if you store a rose in a refrigerator with apples, which give off ethylene, the petals will fall.).

Preparing for the Freeze

The next stage of preparation involves getting ready for freezing temperatures. If the plant did nothing, ice crystals would form within the plant cells, bursting cell walls or dehydrating plasma membranes. When spring arrives, the cell tissues would begin to rot, resulting in the brown pith we often find when we prune.

To prepare for freezing temperatures, plant cells have developed a structure that compensates. In a normal winter, the exterior of a cane would freeze first, with a thin layer of ice forming from water in the air. Then the water between cells would freeze. As more water between the cells freezes, water within the cells is drawn out through the cells' permeable walls. But those walls allow water to pass much more easily than the sugars and other solutes, so what remains within the cells becomes much more concentrated, with a lower freezing point, and acts like antifreeze. The sugars that moved to the canes were taken up by the cells, increasing the initial solute concentration. Without the extra sugars, the freezing process would remove too much solution, resulting in cell dehydration and injury.

If the exterior of the cane should warm up, either under winter sun or during a brief warming period, the water between the cells would normally remain frozen, the concentration of the solution within the cells stay the same, and the cells would survive the temporary thaw. If the warm period lasts long enough for the water between the cells to thaw, water seeps back into the cells, diluting the solution and raising its freezing point. Then, if a sudden cold freeze hits, the diluted solution might form ice crystals, destroying the cell. So, the plant cell faces two dangers from freezing temperatures:dehydration if enough sugars are not present to retain a liquid "antifreeze"; and ice crystal damage if water dilutes the "antifreeze" enough to raise its freezing temperature.

When spring returns, the plant begins to manufacture auxins, stimulating new growth. The new growth taps the store of

carbohydrates in the canes until leaves develop and the vascular system can deliver water from the roots to the leaves. If the cells have been damaged, the carbohydrates are still available in the nearby shattered cells, but with the vascular system destroyed, no water can be pulled from the roots to the new leaves to feed photosynthesis, so the new shoot withers and dies.

Winter Protection

When we look at the purpose of winter protection, it is not to keep the bush "warm," but to moderate the rate at which the bush freezes and thaws. A winter cover that allows water to seep through and freeze causes no danger to the bush, nor does frozen soil. (Frozen soil is more a problem when ice crystals freeze out of surface soil, causing frost heaves, snapping roots; since this occurs only where there is room for the ice to expand (i.e., the surface),mulch or winter cover would move this heave zone to the surface of the mulch or mound, well out of reach of the roots.) Should the water in the winter cover freeze, it would do so slowly, and as warm temperature or sun returns, it would thaw slowly, giving the bush time to adjust.

Water in soil (and on cane surfaces) will freeze at 32 to 23ºF (depending on what is dissolved in the water). Water between the cells (called intercellular water) freezes at 23 to 14ºF. The concentrated solute within the cells freezes at -4 to -40ºF. If a plant has time to prepare, it can withstand quite cold temperatures.

Special Situations

What about roses in containers? Roots are generally not subjected to the harsh temperature changes that the above-ground bush needs to withstand. Although roots do cold harden somewhat, they do not do so as dramatically as the rest of the bush. I found no hard figures for roses, but other species of woody plants suffer root kill at temperatures as wide as 23 to -9ºF. From my own experience, I have had little loss of miniature roses in unprotected containers (one- and three-gallon pots) in a "cold house" with temperatures down to 20ºF,but more significant loss of 1-gallon plants when night temperatures dipped to 15º F for an extended period.

All this discussion about moving gracefully into winter assumes your bushes have been healthy and vigorous all summer. If your plants have been under stress – lack of water during August and September, or leaf drop from blackspot or spider mites – the plants have not been producing normal amounts of carbohydrates. As winter approaches, the bushes will not mysteriously manufacture more. The concentrations of sugars in the canes will be lower than normal, and the potential for freeze damage higher. If such is the case for your bushes, get your winter protection onto your rose beds soon after the first couple of heavy frosts…and pray.

Otherwise, take your time with winter cover. Let the bush adapt naturally. Give the bush time to give up its leaves on its own, with a little assistance only if needed. Then give your bushes the extra measure of protection, especially the crown and roots, as winter progresses and really cold weather threatens. For bushes in the ground, I generally wait until temperatures threaten to drop below 20ºF,and then protect those bushes that are exposed to winter winds, covering the crown and about 6"of cane. Many of my bushes, especially those on their own roots, I give no extra protection at all. And they usually do a fine job of winter protection all on their own.

Reprinted from the American Rose Society website (*www.ars.org*) which obtained the article from the Rose Petals, the website of the Seattle Rose Society. Originally published in the November 1998 Seattle Rose Society newsletter.

Thought for the Month: **"Gardeners will be interested to know that the government says it is the soil that's overworked." Howard Walters, American Rose magazine, January, 2001.**

2012 MEMBERSHIP IN THE HUNTINGTON ROSE SOCIETY

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Make checks payable to Huntington Rose Society and mail to:
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Gary Rankin, Treasurer
109 Cedar Court, Lavalette, WV 25535.

Additional Contribution: $_____

Levels - Prince ($10-25); Princess ($26-50); King ($51-99); Queen ($100 or more)

The Huntington Rose Society is a 501 C-3 non-profit organization and any donations are tax deductible.

The Thorny Bush
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