YARD & GARDEN REPORT

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The perfect project

Are you looking for a fun project? There is nothing quicker and easier than growing paperwhites. It is almost foolproof!

Paperwhites are sold at garden centers this time of year along with amaryllis, tulips and other bulbs. You can plant them in a pot with potting mix, but it is more fun to grow them in a glass bowl filled with pebbles (*Fig. 2*). In this way you can watch the leaves *and the roots* grow.

Place the bulbs close to, but not touching one another. The top of each bulb should be at the surface.

Water the bulbs, putting just enough water to touch the base of the bulbs. Maintain the water at that level.

Paperwhites can grow a bit lanky. Keep the bowl of bulbs in a cool and dark place for a week after planting to encourage stronger rooting. After about a week you will see roots and leaves emerging.

Dump the water out of the bowl. Thereafter irrigate using a water solution with 4–6% alcohol. You can use 70% rubbing alcohol (1 part alcohol to 11 parts water). Distilled spirits such as gin, vodka or tequila can be used. These are 40% alcohol so 1 part booze to 7 parts water will work. Too much booze will kill the bulbs.

Grow the bulbs under cool temps (60s) and bright, indirect light.

The most common variety is 'Ziva'. It grows vigorously and blooms in a few weeks. Its blooms





Figs. 1, 2. Paperwhites are fun and easy to grow.

are pure white. 'Ziva' flowers have a "spicy" smell. Personally, I think they are stinky. Give it a try and judge for yourself how smelly they are.

Other varieties have a more delicate and pleasing scent. 'Grand Soleil d'Or' has lemon yellow petals surrounding an orange cup. 'Chinese Sacred Lily' has pure white petals with a golden cup (*Fig. 1*). It is one of the first flowers to bloom in China and is celebrated in its Lunar New Year festivals.

Toss out the bulbs after the blooms have faded. The bulbs will not bloom again.

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Weed-and-feed fertilizers have limitations

Weed-and-feed fertilizers are popular among gardeners. We can kill weeds and feed our lawn in one step. As the old saying goes, "it's like killing two birds with one stone."

Perhaps that proverb of murdering birds is too violent today. Instead of "killing two birds with one stone," let's say it is like "feeding two birds with one scone."

The problem with weed-and-feed fertilizers is the **best time to kill** weeds is not the best time to feed the lawn.

Late September is a *great time* to *kill weeds*, especially after we have received a light frost. The weeds know winter is coming. The nights are longer and colder. Instead of growing new leaves, they are sending their nutrients down into their roots to prepare for winter. If we spray a weed in late September, the weed will take the herbicide along with its nutrients down to the roots. The entire plant—including the root system—dies.

Late September is *not a great time to feed the lawn*. The grass plants also know winter is coming. They want to stop growing blades and begin preparing themselves for the frigid winter. A fertilizer application prevents this by promoting blade growth and delaying hardening. This makes the lawn more susceptible to winter injury.

It is better to wait until mid to late October to feed the lawn. This is after the grass blades stop growing and after you have stopped mowing. This application is the single most valuable time to fertilize the lawn—any lawn.

You will not see any immediate effects of this dormant application, but the fertilizer will develop a stron-



Fig. 3. Late September is a great time to kill weeds but not a great time to fertilize the lawn. Use herbicide sprays later this month and wait until mid to late October before you fertilize the lawn.

ger root system this fall and generate new buds for blade growth next spring. Turf roots grow until the ground freezes in mid November.

Weed-and-feed products have other shortcomings. First, they may lack sufficient weed-killing power. Many weed-and-feed fertilizers use 2,4-D as their sole herbicide. This chemical will kill dandelions, but is not effective at controlling many other weeds including clover (*Fig. 3*), black medic, ground ivy and bindweed. Some weed-and-feed products add mecoprop, which is useful, but still lack dicamba.

Dicamba is a much more powerful herbicide and it is available to homeowners in broadleaf herbicide spray mixes. One should note that dicamba can build up in the soil and damage shrubs, young trees and perennials. Try to limit your use of dicamba to once per year and the best time is in late September.

Another shortcoming is the herbicide granules may roll off the weed leaves before they are absorbed. Most lawn herbicides are ineffective unless they are absorbed by the leaves of the weeds. This is espe-

cially a problem with small-leaved weeds such as clover and black medic. The directions of weed-and-feed fertilizers will tell you to water your lawn before you apply the fertilizer so the granules stick onto the weeds, but the granules can still roll off the weeds.

You will be much more successful if you *spray* the herbicide on the weeds. Add a drop of detergent to the spray mix and that will further help the spray to adhere to the weed leaves.

Health and environmental concerns also need to be considered. Why should we apply toxic herbicides over our entire lawn if we only have a few weeds? A spot treatment is better for our health, better for our environment, and can save us money.

This fall, don't try to feed two birds with one scone. Instead, feed two birds with two scones (the birds will be healthier and happier). In other words, manage your lawn in two separate operations. Spot spray the weeds in late September and then feed in mid to late October. Your lawn will be healthier and happier.

Sunburn protection for trees

I'll never forget an autumn afternoon spent with my father wrapping trees. He took a roll of brown Kraft paper and wound it around the trunk. Then my father asked me to hold the paper in place while he secured it with twine.

The air was cool and crisp. The golden sun was resting low on the horizon. I was a boy working with my Dad. It was a perfect afternoon.

By wrapping the trees over winter we were not keeping them warm. We wrapped trees to keep them *cool*. This sounds crazy but it's true.

More specifically, we wrapped trees to protect the trunk from getting scalded by the sun.

A tree trunk receives no shade in winter. Its branches are leafless and the trunk is exposed. On a sunny afternoon, the sun casts its rays upon the trunk and heats it up. Temperatures on the sunny southwest side of the tree can be as much as 77°F warmer than on the north side. This heat causes the dormant cells beneath the bark to become active.





Figs. 4, 5. The scalding rays of the winter sun can cause cracks in the bark. A white tree guard can reflect the rays and keep the bark cool.

When the sun sets, the trunk rapidly cools. The activated cells freeze and burst, causing the bark to crack.

Look at maples in town (Fig. 4). On the southwest side you often see a vertical crack on the trunk. Other sensitive trees include linden, mountainash, honeylocust, plum, cherry, crabapple and apple.

Wrap trees for at least their first two winters, until their bark develops texture. The sensitive trees mentioned above will benefit from protection for their first five winters.

Wrap your trees using Kraft paper, starting at the base and winding the paper up to the first major branch. Or, place white plastic tree guards around the trunks (*Fig. 5*). This protection will reflect the rays of the sun off the trunk, keeping it cool. Unwrap the tree after the last frost in spring to let the trunk expand and prevent insect infestation.

Don't use black tree guards. This absorbs heat, which is the last thing you want to do.

Celebrate squash

This is the season to celebrate pumpkins and other winter squash. Nothing can match it for flavor on a cold, wintry night.

Winter squash is part of our state's heritage. Our native tribes harvested immature squash. They sliced it, skewered it through willow sticks and dried it in the sun. This squash was vital for their survival during winter.

The buttercup, considered by many to be the finest flavored of all squash, was released by the North Dakota Agricultural College in 1931 (*Fig.* 6).

Harvest before a hard frost, keeping at least one inch of stem. Wipe dirt off the fruits but do not wash. Cure in a warm (80°F) spot for 10 days to toughen the skin. Acorn squash are not cured.

Later keep cool (50–55°F) and moderately dry (50–70% RH). Store on pallets.

Enjoy the rich flavor of squash this winter. Roast it in the oven or make it into a hearty soup. It will warm up your body with nature's goodness.



Survey of timely topics for gardeners in North Dakota:

FLOWERS



F7. Save geraniums

Dig and place into 6- to 8-inch pots. Cut back to 1/3 height to keep plants compact and bushy. Set near a bright sunny window. Cool temps are best.



F8. Mum warning

Mums planted in fall often do not get established in time to survive winter. Mulch heavily after the ground freezes in November. Plant mums in spring. Select hardy, early blooming cultivars.



F9. Dig nonhardy bulbs

After frost, cut glads to base, dahlias to 3 inches and cannas to 6 inches. Dig bulbs; shake off soil. Dry bulbs for a week in the garage. Brush off remaining soil. Trim and store in sand or peat moss at 40°F.

TREES AND SHRUBS



F10. Fall needle drop

Don't worry; old needles (located near the trunk) are supposed to turn brown. As long as the young needles (located near the tips of branches) are healthy, the tree is full of life.



F11. Powdery mildew on lilac

Rake fallen leaves. Prune canes to bring more air and sunlight into canopy. Keep foliage dry. Lilacs can tolerate it, but a couple fungicide sprays when leaves emerge can reduce damage.



F12. Avoid trimming, fertilizing

Pruning or fertilizing will stimulate new growth, which will be susceptible to winter injury. Wait at least until plants show fall color, a sign they have shut down growth above ground.

FRUITS

4



F13. When to harvest apples?

The background color (seen at the top of fruit) begins to turn from green to yellow. Fruit comes off easily when harvested. Use an upward and twisting motion when harvesting fruit.



F14. Frosty apples

Apples on trees can tolerate temps approaching 25°F before freezing damage occurs. If they freeze, wait to thaw before picking. Use promptly.



F15. Prune raspberries

Remove canes that bore fruit this summer; these are brittle and dying. Cut canes at ground level. In March/April, thin remaining canes to stand 3–4 inches apart.

Survey of timely topics for gardeners in North Dakota (continued):

VEGETABLES



F16. Plant garlic

Plant by early October. Divide cloves and set 4–6 inches apart. Cover with 2 inches of soil. Irrigate. Cover with 4 inches of straw in November. Hardneck types 'Music', 'German Red' and 'Spanish Roja' are hardy.



F19. Harvest blushing tomatoes

Blemish-free fruits with a blush of color will ripen off the vine. Set fruits between newspapers in an area with bright, but indirect light. Room temps are best.





F17. Clean debris

Remove or deeply bury any diseased plants or fruits in the garden. This will reduce the likelihood of infection next year.



F20. Carrot rust fly

Larvae tunnel in roots; their excrement appears rusty. Wounds may lead to bacterial rot; roots are soft and smelly. Deeply plow debris to destroy pupae. If problems repeat, use floating row covers to prevent egg laying on plants.



F18. Harvest potatoes

Use spading fork to dig tubers. Remove loose dirt and avoid bruising. Store in a cool, moist and dark location. Temperatures in high 30s and humidity of 95% are ideal. A root cellar or a cool, damp basement is best.



F21. Test your soil

A soil test can lead to higher yields in the garden and healthier plants in the landscape. You will learn nutrient levels, acidity, salinity and organic matter levels. Extension offices have soil testing materials.



F22. Mosquitoes

Avoid going outdoors from dusk to dawn. Wear long-sleeved shirts, long pants and socks. Use repellents (DEET, picaridin, IR3535, oil of lemon eucalyptus) on exposed skin and clothing.



F23. Boxelder bugs

Congregate on south- and west-facing sides of buildings. Seal crevices in doorways, windows and foundation. Spray with detergent (3 tbsp per gallon water). Several sprays will be needed.



F24. Yellowjackets, ground nest

Kill pests if nest is in hazardous place. Sprinkle, or better yet use a turkey baster to shoot Sevin dust into the hole of nest. Apply during a cool night.

Weather Almanac for September 14–20, 2014

	TEMPERATURE				RAINFALL				GROWING DEGREE DAYS ^{1,2}			
	We		Neek		Week		2014		Week		2014	
Site	Avg	Norm	Max	Min	Total	Norm	Total	Norm	Total	Norm	Total	Norm
Bottineau	54	56	80	30	0.21	0.33	16.52	14.71	69	57	1819	1998
Bowman	57	56	81	32	0.00	0.28	15.97	12.69	75	63	1786	2075
Carrington	57	57	84	32	0.04	0.42	12.44	16.53	75	62	1854	2151
Crosby	57	54	80	30	0.01	0.27	13.03	12.59	73	54	1791	1856
Dickinson	57	56	80	29	0.00	0.35	15.81	13.96	73	64	1853	2054
Fargo	59	59	80	41	0.07	0.56	15.17	17.85	75	62	2260	2303
Grafton	56	59	81	33	0.61	0.39	18.01	16.42	67	58	1999	2313
Grand Forks	58	56	85	34	0.18	0.44	17.56	16.64	75	58	2108	2059
Hazen	56	58	84	31	0.00	0.33	17.40	14.01	76	71	1899	2256
Hillsboro	56	58	79	35	0.36	0.48	16.59	17.20	70	58	2078	2175
Jamestown	58	57	82	38	0.17	0.48	14.77	16.10	75	58	1963	2134
Langdon	54	54	82	34	0.24	0.41	11.54	16.09	58	49	1704	1720
Mandan	58	57	83	33	0.01	0.34	13.68	14.98	77	61	1965	2144
Minot	58	56	81	37	0.06	0.32	17.45	14.98	70	52	1866	1958
Mott	56	57	81	30	0.00	0.30	16.10	13.72	75	68	1856	2146
Rugby	56	55	81	33	0.28	0.42	13.57	16.33	70	57	1893	1991
Wahpeton	58	60	80	33	0.48	0.64	16.50	17.86	79	65	2170	2404
Watford City	58	56	82	31	0.00	0.20	9.69	12.25	84	62	1998	2065
Williston	59	59	83	29	0.00	0.25	9.81	12.00	81	70	2036	2329
Wishek	57	56	83	33	0.00	0.45	13.19	17.35	74	57	1860	1957

DAYLENGTH (September 20, McClusky)3

Sunrise: 7:25 AM | Daylength: 12h 20 m

Sunset: 7:46 PM | Change since Sep. 13: –24m

LONG-TERM OUTLOOKS⁴

6–10 Day: Temp: Above Normal; Precipitation: Above Normal 8–14 Day: Temp: Above Normal; Precipitation: Above Normal

Credits

Sources

Andrews, N. 2008. Carrot rust fly biology and management. www.smallfarms.oregonstate.edu/sfn/su08/carrotrust/. Oregon St. Univ.: Corvallis.

Bachmans, Inc.. 2007. Paper white narcissus. Garden care sheet. www.bachmans.com/Garden-Care/. Twin Cities: Minn..

Miller, W.B. 2014. Ginning up paperwhites that don't flop over. Flower Bulb Research Program. www.hort.cornell.edu/miller/bulb/Pickling_your_Paperwhites.pdf. Cornell Univ.: Ithaca, NY.

K. Wagner and M. Kuhns. 2011. Sunscald injury or southwest injury on deciduous trees. Utah St. Univ.: Logan.

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¹GDDs for garden vegetables are not available. GDD data in this table are for corn, which responds to temperature as most vegetables grown in gardens. Data begin May 1 with base minimum and maximum temperatures of 50 and 86°F., respectively.

^{2,3,4} Sources: North Dakota Agricultural Weather Network, www.sunrisesunset.com, and National Weather Service, respectively.