YARD & GARDEN REPORT

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The legend of Montana Maggie

We all joke about our zucchini. It gets no respect. A zucchini vine is an amazing producer of nutritious vegetables. And yet, instead of admiring this humble vegetable, we ridicule it and take it for granted.

We dump extra zucchini in unlocked cars in the neighborhood. Some gardeners even smile when a light frost kills zucchini vines and finally ceases their production.

Even the Hunger Free North Dakota project, while begging for vegetable donations, asks that only one zucchini plant be allowed to grow per county.

When I was a kid, my brothers and I could always find uses for zucchini. We enjoyed using giant zucchinis as baseball bats.

Did you know zucchinis float? You can carve a big zucchini into the shape of a canoe, put a mast on it, and have zucchini toy boat races.

It's truly a versatile vegetable. Recently, I learned of another use of zucchini—as a WEAPON!

Montana Maggie loved the outdoors and she loved her garden. One day, a bear wandered in her backyard and started to eat apples from her tree. This angered Maggie's dogs and they started to bark.

This barking made the bear mad.

The bear started to attack one of Maggie's dogs. This made Maggie mad.

She kicked the bear under the chin using a kick she learned from self-defense training at the YMCA.



Fig. 1. The all-purpose zucchini: It can nourish and PROTECT you!

That got the bear REALLY MAD.

The bear swiped at Maggie's leg and started to move toward her.

Maggie scrambled back into the house. She tried to close the door, but the bear stuck its head through the doorway.

Maggie's life was in jeopardy. She got behind the door and tried to close it with all of her might, but the bear was too strong. Out of desperation, she blindly reached with her hand for something—anything—on the kitchen counter to defend herself. She found it.

No, it wasn't a knife. It was a zucchini she harvested that morning.

She grabbed the zuke and bopped it on the bear's head.

The startled bear turned away and ran in fear.

Now zucchini has my utmost respect. It can nourish, entertain, and PROTECT you.



Fig. 2. The productivity of zucchini deserves our respect.

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Frost scare

Frost may strike parts of our state this week. This is terrible news—it's way too early!

This frost might be the end of a disappointing year for many crops. The season started poorly this year due to a cold spring. Most gardens were planted later than usual and never caught up.

As of today, crops in most of our state are a week or two behind schedule (see Page 6 for Growing Degree Days information). The last thing we need is an early frost.

We cannot stop Jack Frost from coming, but we can be ready for him.

Our first frost is usually a light one (29–32°F). In this case, we can protect our sensitive plants with a blanket or tarp. This will provide a few degrees of protection, which is all we need.

Keep in mind that cold air sinks. Gardens in low spots (frost pockets) are most vulnerable to damage from early frosts.



Fig. 3. The main harvest season of tomatoes is underway. Protect your vines from the first frost and you may extend the harvest a few weeks.

Cover your most sensitive plants. In the vegetable garden, tomato, pepper, cucumber, squash and melons are most sensitive to frost.

Broccoli, cabbage, carrot and radish can tolerate light frosts and do not require protection. The cool temperatures of fall will actually improve the flavor of these vegetables.

The frost may kill potato vines, but their underground tubers will be safe.

Impatiens, zinnia, celosia, geranium and coleus are among the most sensitive of flowers.

Among the most frost-tolerant flowers are petunia, marigold, cosmos and pansy.

If we can withstand this first light frost, we will likely get two or more weeks of gardening season before a hard frost (28°F or colder) strikes. When that killing frost is expected, you need to harvest whatever tender vegetables you can. This includes peppers, cukes and squash. Blemish-free tomatoes with a pink blush can ripen off the vine.

Apples on trees tolerate temperatures down to 25°F before suffering damage.

Additional maps on the historic probabilities (10%, 50% and 90%) of light (32°F) and killing (28°F) frosts for your area are posted online by the North Dakota State Climate Office: www.ndsu.edu/ndsco/frost/8110/.

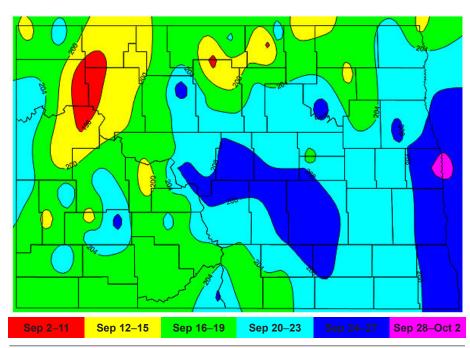


Fig. 4. Median date of first 32°F frost. In 50% of years, the first frost occurs earlier than the dates shown above. Killing frosts occur about 10 days later.

The best time to fertilize your lawn

Fall is a great time to fertilize the lawn. Lawns are hungry now and they will develop most of their root systems during this season.

The timing of application(s) in fall is dependent on how you maintain the lawn (*Table 1*).

All lawns will benefit from an application in mid to late October. This is AFTER the turf blades stop growing and AFTER you have stopped mowing.

You won't see an immediate response to this "Columbus Day" application, but it will make a big difference below ground. Roots keep growing until the ground freezes and this fertilizer will promote more root growth. Aboveground, this fertilizer will develop leaf shoots that will grow next spring.

Now is a good time to fertilize medium- and high-maintenance lawns. Lawns are actively growing now and this "Labor Day" fertilizer promotes vigorous blade growth and stronger root systems.

A soil test is recommended to determine exactly what fertilizer your lawn needs. In most cases, a winterizer fertilizer is recommended. Formulations vary, but most winterizer fertilizers are approximately 25-3-10 (25% nitrogen, 3% phosphate and 10% potash). Winterizer fertilizers provide a little extra potash compared to summer fertilizers. This boost of potash promotes winter hardiness.

Fertilizers with slow-release nitrogen are valuable since they provide a consistent release of nitrogen to the growing plants. They are more expensive, however.

Follow the rates on the fertilizer package. A standard rate is 1 pound of *actual* nitrogen per 1,000 square



Fig. 5. Fall is the most important time to fertilize the lawn. Now is when roots of turf most actively grow.

feet. One pound of actual nitrogen is in four pounds of a 25% nitrogen fertilizer (such as 25-3-3). Excess nitrogen can burn the turf.

Reduced rates can be used in shady spots. They grow more slowly and only need about half as much fertilizer as sunny spots.

To prevent creating dark green stripes in your yard, apply half the fertilizer going back and forth in one direction and the other half going perpendicular to that. For example, apply half going north-south and the other half going east-west.

Be careful about fertilizing in late September/early October. This "Indian Summer" fertilization can delay the hardening of the turf and make it more susceptible to winter injury.

For this reason, weed-and-feed fertilizers are not recommended. The most effective time to kill weeds (late September) is not a good time to fertilize the grass. Use a separate treatment to kill weeds.

Fertilization in early spring is not recommended. This stimulates leaf growth at the expense of root growth. The key to a healthy turf is a strong *root* system.

Water your lawn after fertilizing. This increases the effectiveness of the fertilizer and reduces the likelihood the fertilizer will run off due to a heavy rainstorm.

Table 1. Timing of lawn fertilizations for different maintenance levels.

Maint. level	Recommended application times							
Low	-	-	-	Mid-late October Columbus Day				
Medium	Late May <i>Memorial Day</i>	-	Early Sept. Labor Day	Mid-late October Columbus Day				
High	Late May <i>Memorial Day</i>	July¹ 4th of July¹	Early Sept. Labor Day	Mid-late October Columbus Day				

¹Organic fertilizers recommended for summer applications. This application may be skipped if you let clippings fall and/or your lawn is more than 10 years old. Only fertilize in summer if you irrigate regularly. Do not fertilize if the lawn is dormant.

Survey of problems found in North Dakota yards and gardens this week:

TREES AND SHRUBS



F6. Early leaf drop of poplar

Poplars and aspens subject to leaf blight are shedding leaves now. Rake leaves to get fungus out of the area. Pruning helps to reduce humidity and diseases in canopy; do this in March.



F7. Tree planting

Fall is a great time to plant trees. Plant ASAP to allow roots time to get established before winter. Plant evergreens by the end of September and leafy trees by the end of October.



F8. Fall webworm

Caterpillars eat leaves but cause little damage to trees (leaves are expendable on mature trees now). Most feeding is over now and insecticide sprays would not be useful.

LAWNS



F9. Mowing

Cut turf tall and let clippings fall. Tall turf develops a deep root system. Cut lower than usual at the last mowing to avoid voles and diseases over winter.



F10. Perennial weeds

Spray thistle and other perennials in mid to late September. Weeds will channel the herbicide down into their roots as they prepare for winter. Products with dicamba recommended.



F11. Slime molds

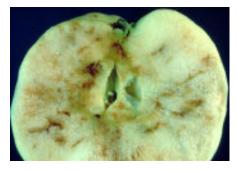
Raindrops splash mold spores from thatch to grass blades. The spores smother, but do not penetrate the blades. Rake to aerate or use a strong stream of water to wash off mold. No fungicides recommended.

FRUITS



F12. When to harvest pears?

Harvest before fully mature. Pick when its skin changes from dark green to yellowish green; its skin texture begins to feel waxy and smooth; and spots on the skin change from white to brown.



F13. Apple maggot

Fruits develop dimples where flies laid eggs. Maggots hatch and create trails into fruits. Pick up fallen fruit. Hang traps in July to monitor for flies. Insecticides can protect fruit in future.



F14. Cracked apples

Caused by recent rains. A rush of water into the ripening fruits causes the apples to burst. Cracked fruits will ripen prematurely and be subject to diseases. Infected fruits should not be used.

Survey of problems in North Dakota yards and gardens (continued)

VEGETABLES



F15. Potato scab

Peel off scabs. In future, keep soil evenly moist while tubers grow (4–6 weeks after flowers appear). Use resistant cultivars and certified disease-free seed. Avoid using fresh manure.



F18. Cracking

Caused by rapid growth of fruits; often due to rains after period of drought. Cracks may become infected. Mulch plants to maintain uniform moisture conditions. Use resistant varieties.



F21. 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.



F16. Angular leaf spot

Angular lesions turn brown and drop out. Avoid getting foliage wet. Stay out of garden when wet and avoid wounding cucumber vines when harvesting. Copper sprays can prevent spread of bacteria.



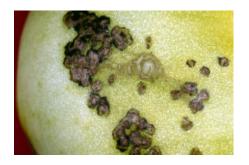
F19. Bacterial speck

Tiny, dark, sometimes raised specks develop on green and red fruits. Occurs under cool (60s to low 70s) temps. Spots develop on vines. Avoid working in garden when wet. Spray with copper.



F17. Harvesting watermelon

Watermelons are ripe when the tendril next to the fruit dries. Rind of melon will be faded, not glossy. Mature melons feel heavy. Spot on underside of fruit will be white or yellow and not greenish.



F20. Bacterial spot

Dark, corky spots (diameter of pencil eraser) on green and red fruits.

Occurs under warm (mid 70s–80s) temps. Spots develop on vines. Avoid working in garden when wet. Spray with copper.



F22. Crickets

Seal windows, doors and foundation. Reduce outdoor lighting. Remove debris near foundation. Insecticides may be sprayed near entries. Crickets die from frost; starve when indoors.



F23. Slugs

Apply iron phosphate baits. Sprinkle diatomaceous earth around perimeter of garden. Fill pie tins with beer to trap slugs. Set out boards; gather slugs that gather underneath the boards.

Weather Almanac for August 31–September 6, 2014

TEMPERATURE					RAINFALL			GROWING DEGREE DAYS ^{1,2}				
	Week			We	Week 2014		014	Week		2014		
Site	Avg	Norm	Max	Min	Total	Norm	Total	Norm	Total	Norm	Total	Norm
Bottineau	59	62	79	37	0.87	0.38	16.31	14.05	72	76	1710	1851
Bowman	59	63	86	39	0.27	0.26	15.79	12.12	73	83	1665	1914
Carrington	60	63	78	42	0.85	0.50	11.83	15.62	73	80	1730	1995
Crosby	59	60	77	42	0.42	0.30	12.92	12.03	66	75	1685	1716
Dickinson	60	62	82	39	0.28	0.34	15.35	13.26	70	84	1735	1891
Fargo	65	65	80	48	1.76	0.68	14.92	16.62	88	87	2121	2145
Grafton	63	65	80	44	0.76	0.46	17.25	15.61	83	88	1873	2160
Grand Forks	63	62	82	44	0.43	0.56	16.59	15.70	85	77	1972	1911
Hazen	60	64	82	41	0.94	0.35	17.22	13.36	75	89	1772	2078
Hillsboro	63	64	80	43	0.61	0.55	15.33	16.20	82	80	1948	2025
Jamestown	62	63	78	44	0.99	0.60	14.15	15.02	74	78	1837	1985
Langdon	59	60	77	41	0.76	0.45	11.22	15.25	70	67	1604	1594
Mandan	61	64	82	42	0.75	0.39	13.42	14.28	75	81	1835	1990
Minot	61	62	78	46	1.13	0.37	17.38	14.32	71	74	1758	1822
Mott	59	63	84	38	0.08	0.30	15.89	13.12	74	88	1730	1974
Rugby	60	61	78	42	0.58	0.44	13.29	15.50	71	76	1780	1844
Wahpeton	64	66	79	45	0.37	0.76	15.98	16.49	84	93	2028	2236
Watford City	61	62	81	40	0.35	0.26	9.59	11.81	74	81	1867	1908
Williston	61	65	79	44	0.60	0.32	9.78	11.48	72	91	1915	2152
Wishek	61	62	78	43	0.09	0.49	12.81	16.40	73	76	1738	1810

DAYLENGTH (September 6, McClusky)3

Sunrise: 7:07 AM | Daylength: 13h 8 m Sunset: 8:14 PM | Change since Aug. 30: –23m

LONG-TERM OUTLOOKS⁴

6-10 Day: Temp: Below Normal; Precipitation: Below Normal

8-14 Day: Temp: Normal; Precipitation: Below Normal

Credits

Sources

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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.