

# YARD & GARDEN REPORT

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## Purple Power

Give a child a box of crayons and ask them to draw a leaf. They'll open the box and look for a green crayon. Leaves are GREEN, right?

Not always. Some plants have purple leaves. Purple plants are distinctive. Purple plants are showy. Purple plants are flamboyant!

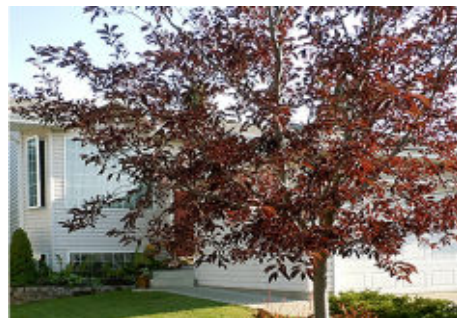
Do you want to add something dramatic to your landscape? Think PURPLE.

Start with shade trees. The most magnificent purple-leaf shade tree is 'Deborah' Norway maple (*Fig. 1*). 'Deborah' originated in Canada and is hardy to Zone 4. Its new foliage is brilliant purple-red, later developing shades of bronze over summer. Norway maple grows fast and is more adaptable to harsh soils than sugar and red maples. 'Deborah' grows up to 50 feet tall.

Chokecherry is the most common purple-leaf tree in North Dakota (*Fig. 2*). This small tree tolerates dry, infertile soils and is often planted along streets. Its spring green foliage turns purple over summer. 'Canada Red' is reported to be a branch sport of 'Schubert', with faster growth and brighter leaves.

'Newport' plum is beloved for its light pink flowers, among the first flowers of spring. Its foliage is deep red to purple and it will produce small, 1-inch purple plums. 'Newport' originated in Minnesota and is hardy to Zone 4.

Bear in mind that chokecherry and 'Newport' plum are short-lived plants, often declining after 20 years.



Bailey Nurseries, Inc.

*Figs. 1–3. 'Deborah' Norway maple is the most majestic purple-leaf tree for landscapes in North Dakota; 'Schubert' chokecherry is an eye-catching small tree; and 'Center Glow' ninebark is a tough, beautiful shrub.*

On the other hand, ninebark is one of the toughest, longest-lived plants. The shrub is hardy and tolerates our dry, alkaline soils. 'Diablo' is an award-winning plant that develops into a 10-foot mound of arching canes. 'Center Glow' has brighter foliage and lime-green centers on its new leaves (*Fig. 3*).

Purple-leaf cultivars of Japanese barberry are popular as accent plants and hedges. Both barberry and ninebark resist deer.

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# Mulch Madness

Do you enjoy torturing plants? If yes, get some rock mulch and put it around your plants.

Rock mulch does nothing for a plant. A rocky bed may look good to us, but the plants are crying in pain.

Use shredded bark instead. It's better for many reasons:

1. Shredded bark will moderate temperatures. It will keep a plant cooler during summer and warmer during winter. Perfect!

Rock mulch is a heat trap. It will scorch plants during the summer and make plants uncomfortable in winter, too. For heat-sensitive plants like birch, mountain ash and hosta, the use of rock mulch may contribute to premature death (Figs. 4, 5).

2. Shredded bark improves the soil. It enhances soil structure, leading to an aerated soil that can hold onto nutrients and moisture. Although there can be a short-term loss of nitrogen, the bark will eventually compensate for this and add more nutrients.

Rock mulch harms the soil. Its heavy weight compacts the ground and destroys air pockets needed for roots to grow. Also, rocks add no nutrients to the soil.

3. Both mulch types protect plants from lawn mowers, but the jagged edges of rock mulch can cause harm on tender bark.
4. Both mulch types conserve moisture, but the heat generated from rock mulch creates greater drought stress on the plants.

Rock mulch is *terrible* for plants—so why do we use it?

Some gardeners worry about weeds growing in shredded bark. True, shredded bark will allow more



Figs. 4, 5. This burning bush got burned to death in a bed of rock mulch (excuse the pun). The birch at right suffered from heat generated by rock mulch, which contributed to a severe infestation of bronze birch borer.

weeds compared to a barrier of jagged rocks and landscape fabric. However, weeds in shredded bark are sparse and pull out easily. A spray of Roundup once a year may be applied to control tough weeds like quackgrass.

Some gardeners are frustrated that shredded bark can blow away. Rarely is this a significant problem if the mulch is applied properly:

Shredded bark should be applied in a circle at least three feet wide; the wider the better. Take the mulch all the way out to the dripline, if you want. The mulch should be minimal

at the trunk and gradually increase in depth to three to four inches around the perimeter (Fig. 6).

Do not heap mulch around the trunk—these “volcano” mulch piles harm the tree by causing trunk rot and encouraging mice to nest near the trunk (Fig. 7).

The next time you plant a tree or shrub, show it some love and surround it with shredded bark. You will be rewarded with a happy, healthy plant.

*Revised from an article published in the NDSU Yard & Garden Report of August 16, 2013.*



RIGHT



WRONG

Figs. 6, 7. The right and wrong way to mulch a tree. Place minimal mulch at the trunk and gradually build it to a depth of up to 4 inches around the perimeter. Avoid accumulating mulch near the trunk since this leads to trunk rot and attracts rodents that nest in the mulch and feed on the bark.

# Hort Shorts

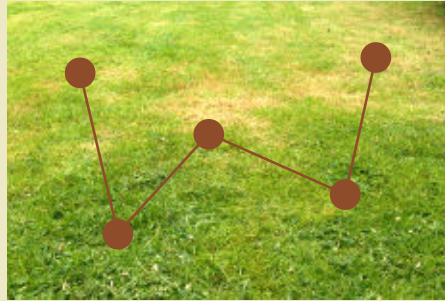


## CONTROLLING SKUNK DAMAGE TO LAWNS

Skunks are digging shallow holes in turf at night, looking for grubs (*left*). Repel skunks by placing mothballs or ammonia-soaked rags in the area. Keep the area lit at night (*center*). Grub-killing granules may be applied.

Skunks may be caught in a live trap using fish-flavored cat food or chicken guts as bait. Cover the trap with a heavy canvas. Attach a string at the door to release the critter later. Skunks can shoot their scent 15 feet.

Gently transport the skunk in the covered cage (*right*) using an open vehicle. Release at least 10 miles away, and away from dwellings. Alternatively, skunks may be killed with 5–10 minutes of car exhaust.



**Lawn and Garden Solutions**  
 NDSU Soil Testing Laboratory - 701.231.8942  
[www.ndsu.edu/fileadmin/soils/services/soil\\_testing\\_lab/](http://www.ndsu.edu/fileadmin/soils/services/soil_testing_lab/)    [ndsu\\_soil@ndsu.edu](mailto:ndsu_soil@ndsu.edu)

DATE OF USE: \_\_\_\_\_

NO. SERVICES REQUESTED:  Routine soil checks     Soil     Plant     Plant     Plant

Nitrogen     Phosphorus     Potassium     Sulfur     Zinc     Iron     Copper     Manganese     Calcium     Magnesium     Boron     Sodium     Chloride

DATE SAMPLED: \_\_\_\_\_

To properly diagnose a problem or make a fertilizer recommendation, the soil should be tested for nitrate-nitrogen, phosphorus, potassium, organic material, pH and salts. For current prices, please call (701) 231-8942 or speak with an extension agent. Payment should be made with sample. Bring with soil separately.

BUSINESS NAME: \_\_\_\_\_ PHONE: (\_\_\_\_) \_\_\_\_\_

YOUR NAME: \_\_\_\_\_ FAX: (\_\_\_\_) \_\_\_\_\_

ADDRESS (for billing purposes): \_\_\_\_\_ E-MAIL: \_\_\_\_\_

## TAKING A SOIL SAMPLE

If you have a mysteriously sick tree, weak lawn or an unproductive garden, you may want to get a soil test. It may be the best \$18 investment you ever made. Use a clean shovel and a 5-gallon bucket.

We want a good representation of the area so take samples from several random spots (make a crooked "W", for example). Go 4–6 inches deep. Mix the shovelfuls in the bucket to make a composite sample.

Download the form [https://www.ndsu.edu/fileadmin/soils/pdfs/lawn\\_and\\_garden\\_solutions.pdf](https://www.ndsu.edu/fileadmin/soils/pdfs/lawn_and_garden_solutions.pdf). Mail to NDSU in Fargo. In a couple weeks, you will receive strategies to improve your soil's fertility.



## PROTECTING BIRCH FROM BORERS

Borers are emerging out of birch (*left*), mating, and laying eggs. Eggs hatch into larvae that tunnel inside the tree, destroying its vascular system (*center*). This destruction prevents water moving to the top of

the tree, and it dies back (*right*). If two-thirds of the tree is healthy, it likely has a viable enough vascular system to move insecticides throughout the tree. A soil drench of imidacloprid is used to kill the pests.

Heat-stressed birch trees are susceptible to borers. Select heat-resistant cultivars and place in a cool location (a north- or east-facing location). Place shredded bark around the tree. Irrigate when dry.

# Survey of problems found in North Dakota yards and gardens:

## TREES AND SHRUBS



### Herbicide injury

Leaves become elongated, curled or cupped. Most woody plants survive. In the future, use herbicides only when needed. Spray when wind is minimal; use heavy droplets; avoid hot days.



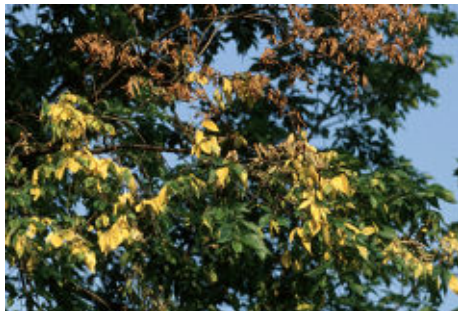
### Pear slugs

Slimy larvae skeletonize leaves of rose, chokeberry, pear and cherry. Control with carbaryl or insecticidal soap. No treatment is required on mature plants.



### Bumps on leaves

Mites or aphids pierce leaves, creating galls. Silver maple, hackberry and linden are often affected. Damage is mostly aesthetic. Pesticides are not useful as pests are gone now.



### Dutch elm disease

A major branch shows yellowing and wilting. Take a one-inch-diameter sample and look for brown streaking beneath the bark and in sapwood. Prompt removal of an infected tree is the most effective option, especially if multiple branches are affected. Burn, bury or chip wood.



### Lecanium scale

Affects oak, maple, crabs and other leafy trees. Insects suck sap out of branches, causing dieback. Crawlers are hatching now. Spray with acephate, carbaryl, pyrethroids or summer oils. Dormant oil may be sprayed in spring before bud break.

## FLOWERS



### Rust on hollyhock

Orange, powdery pustules develop on underside of leaves. Remove infected leaves/stalks. Avoid getting foliage wet. Clean debris in fall. Scout for rust in spring. If found, apply fungicides (chlorothalonil, sulfur) every 10 days.



### Black spot on rose

Round dark spots with fringed margins; surrounding tissues turn yellow. Remove infected foliage. Avoid overhead watering. Apply fungicides. Grow disease-resistant varieties.



### Powdery mildew on peony

Gray blotches appear. Avoid getting foliage wet. Clean debris in fall. Scout for mildew on leaves early next spring. If found, apply fungicides, if desired. Consider dividing plants in fall to promote better air flow within planting.

# Survey of problems found in North Dakota yards and gardens:

## VEGETABLES



### Twisted plants

Pesticide drift or herbicide-tainted manure may cause curling of foliage. Plants are stunted and vegetables may be contaminated. Avoid spraying herbicides in summer.



### Cucumber beetle

Striped and spotted beetles feed on leaves of cucumber and muskmelon, spreading a bacterium that causes wilting. Pests may be controlled with neem, permethrin, bifenthrin or carbaryl. Spray in early evening to avoid killing honeybees.



### Squash vine borer

Wasp-like, 1/2-inch adults lay eggs in the base of squash and pumpkin vines. Listen for the buzzing pests. Set out traps of yellow bowls with soapy water. If found, spray base of vines with permethrin, bifenthrin or carbaryl. Repeat 7–10 days later.

## FRUITS



### Pear leaf blight

Rake fallen leaves. In winter, prune to increase sun and air flow in canopy. Spray captan or sulfur in spring to prevent infection.



### Apple maggot

Maggot flies emerge now and will lay eggs in fruits. Sticky traps can be hung to monitor for pests. If found, consider protecting fruit with carbaryl, malathion or other insecticide.



### Cottony scale on grape

Crawling pests are emerging out of cottony egg sacs. Ladybugs and other natural enemies usually control this pest. Insecticidal soap, carbaryl or summer oils kill crawlers.

## WEEDS



### Chickweed

Low-growing, matted annual with tiny white flowers. Flowers have five petals each with two lobes. In lawns, raise mower height and promote thicker turf. In gardens, cultivate when young.



### Field bindweed

Aggressive, persistent perennial with spade-shaped leaves and white or pink blooms. Its deep roots make pulling difficult. Spray with glyphosate or dicamba. Fall applications best.



### Black medic

Cloverlike annual plant with yellow blossoms. Its taproot makes it hard to pull. Thicken turf (fertilize, mow tall) to choke out medic seedlings. Spray with Trimec before flowers mature.

# Weather Almanac for June 20–June 28, 2016

Site	TEMPERATURE				RAINFALL				GROWING DEGREE DAYS <sup>1,2</sup>			
	June 20–28				June 20–28				2016			
	Avg	Norm	Max	Min	Total	Norm	Total	Norm	Total	Norm	Total	Norm
Bottineau	62	65	82	45	2.04	1.21	8.17	8.82	103	125	731	644
Bowman	68	65	95	43	0.01	0.85	5.66	8.50	144	123	788	592
Carrington	65	67	87	46	0.17	1.11	5.64	9.26	121	138	746	694
Crosby	63	63	81	47	3.36	0.95	9.09	7.19	103	111	705	578
Dickinson	67	64	94	47	0.50	1.10	5.36	8.63	139	120	791	618
Fargo	69	68	86	47	0.14	1.20	5.62	10.46	152	149	896	754
Grafton	65	66	83	50	0.30	1.20	13.88	9.36	118	128	776	664
Grand Forks	65	66	83	45	0.00	1.13	8.22	8.99	121	132	816	678
Hazen	65	66	95	39	0.52	1.07	5.85	8.69	128	133	798	719
Hillsboro	66	67	85	44	0.00	1.17	5.95	9.73	131	140	835	704
Jamestown	66	67	89	48	0.14	1.11	8.46	8.86	127	138	790	677
Langdon	62	63	80	49	0.91	1.23	8.79	8.86	95	109	668	542
Mandan	66	67	94	42	0.32	1.03	7.97	8.33	132	136	796	655
Minot	64	66	85	50	0.35	1.04	7.35	9.26	112	125	737	607
Mott	65	66	94	41	1.01	0.94	5.91	8.97	128	129	764	641
Rugby	64	65	87	47	0.43	1.10	7.22	9.38	116	124	770	656
Wahpeton	67	69	88	44	0.14	1.08	5.98	9.95	140	155	880	801
Watford City	66	65	90	46	0.56	0.98	5.36	7.40	131	122	776	631
Williston	66	67	86	50	0.63	0.88	5.80	6.98	128	141	780	730
Wishek	65	65	89	48	0.83	1.18	7.76	10.41	127	123	722	594

## DAYLENGTH (June 28, McClusky, center of ND)<sup>3</sup>

Sunrise: 5:47 AM | Daylength: 15h 56m  
 Sunset: 9:43 PM | Change since June 19: –2m

## LONG-TERM OUTLOOKS<sup>4</sup>

July 04–08: Temp.: Above Normal; Precip.: Above Normal  
 July 06–12: Temp.: Above Normal; Precip.: Normal

<sup>1</sup> GDDs 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.

<sup>2,3,4</sup> Sources: North Dakota Agricultural Weather Network, [www.sunrisesunset.com](http://www.sunrisesunset.com), and National Weather Service, respectively.

## Credits

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