

# YARD & GARDEN REPORT

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## First impressions

The first colors of autumn are beginning to show and they are brilliant! The seed pods of Hot Wings® tatarian maple are blazing.

Selecting trees for fall color is a challenge for us in North Dakota. The finest trees in autumn, including most maples, struggle here. Our soils are too dry and alkaline.

Tatarian maple is an exception. It tolerates even our harsh soils and is hardy throughout the state.

Its seed pods (samaras) appear as fiery red wings. These wings contrast beautifully against the deep green foliage. Magnificent!

Tatarian maple is a small tree, growing only about 20 feet tall and wide. Its upright, spreading habit makes it an outstanding accent tree in small yards. Hot Wings® is a selection of tatarian maple noted for its radiant seed pods, vivid fall color, and strong tree structure.

If you love maples, get an analysis of your soil. If your pH is acidic to near neutral (approx. 7.2 or below), you can grow the superstars of autumn: red and sugar maples.

Superior red maples include Northfire® and 'Northwood'. Fall Fiesta® and Northern Flare® are great sugar maples admired for their gold and orange colors. Autumn Blaze® has red maple heritage and is the leading Freeman maple.

For more information, watch Greg Morgenson's 2014 talk on hardy maples at [dakotamedia.access.org/dakota-growing](http://dakotamedia.access.org/dakota-growing).



Photos courtesy of Bailey Nurseries, Inc.



*Figs. 1, 2. The seed pods of Hot Wings® tatarian maple are brilliant. This small tree is one of the easiest to grow maples in the state.*

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## Vines add a special touch

Vines add the finishing touch when designing a landscape. It's like adding a cherry on top of an ice cream sundae. Perfect!

Some vines have flowers that sparkle before our eyes (Fig. 3).

Other vines accentuate the beauty of structures in the yard. They add vitality to a cold brick wall (Fig. 4). Vines soften a fence and enhance the look of pillars. Vines add textures and fullness to arbors and lattice screens.

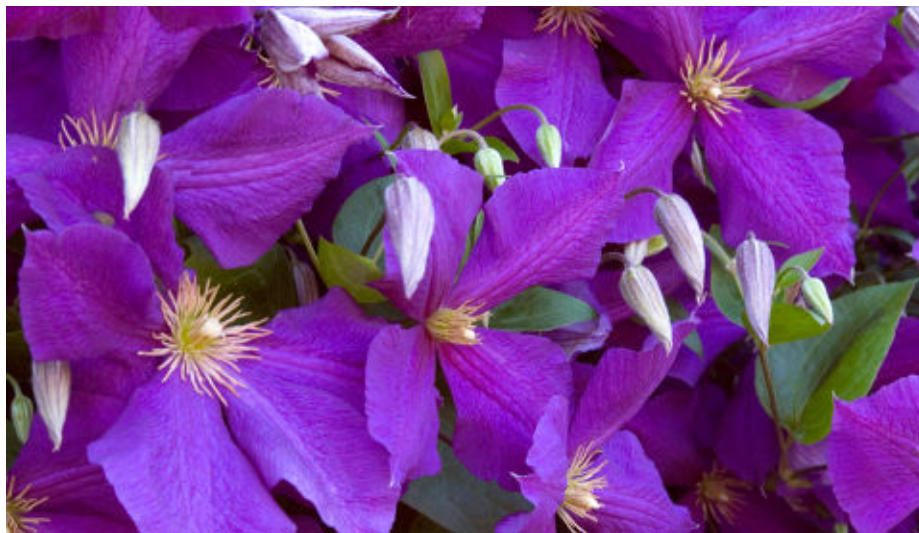
When designing with vines, our palette of choices is limited. Only a few vines can survive the brutal winds and winters of North Dakota:

Among flowering vines, nothing can match the display of clematis. There are literally hundreds of varieties to choose from. 'Jackmanii' is most widely grown (Fig. 3). It is hardy and easy to care for. Simply cut it back to 12–18 inches every April and it will bloom on new wood.

The cream-colored sweet autumn clematis is especially vigorous and delightfully fragrant in fall. 'Sweet Summer Love' is a promising new variety noted for its purple flowers and earlier blooming.

Virginia creeper (*Parthenocissus quinquefolia*) is the most popular vine used in northern landscapes (Fig. 4). This is the vine that creeps on college buildings and along chain-link fences. It's noted for its dense leaves, burgundy red fall color and blue fruits. The vines have holdfasts and tendrils that can grip onto stone, brick or concrete. The variety Engelmann is preferred for its smaller, fine-textured leaves.

Autumn Revolution™ bittersweet (*Celastrus scandens*) is a significant improvement over the native type.



Photos of clematis and bittersweet are courtesy of Bailey Nurseries, Inc.

*Figs. 3–5. 'Jackmanii' clematis blooms prolifically and is easy to grow. Virginia creeper grows quickly, clasps readily along walls, and has beautiful fall color. The fruits of Autumn Revolution™ bittersweet are simply remarkable.*

Bittersweet is grown for its fall fruits. Autumn Revolution™ has a high degree of perfect (male/female flowers), leading to many more and larger fruits (Fig. 5). The plants will thrive in almost any soil.

Few climbing roses can flourish in North Dakota—with or without winter protection. 'William Baffin' from Canada is unrivalled for its hardiness. The pink-flowered beauty will grow up to 10 feet tall and does not require protection in Zone 4.

'Dropmore Scarlet' is a popular honeysuckle (*Lonicera* species). Its bright orange-red flowers will bloom from June to September. Butterflies

and hummingbirds love it.

Grape (*Vitis* species) vines grow vigorously and can quickly cover a trellis. Some wild grape vines produce delicious fruit and some don't. Among cultivated varieties, 'Valiant' is most vigorous and reliable.

Other hardy vines include Dutchman's pipe (*Aristolochia durior*), noted for its huge leaves and quick growth. Kentucky wisteria (*Wisteria macrostachya*) has lovely lavender spikes, but is not as fragrant as other wisteria and is a bit finicky. Trumpet creeper (*Campsis radicans*) is foolproof and can tolerate salty soils.



**GOOD**



**BAD**



**BAD**

## MULCHING TREES

Shredded bark mulch will conserve soil moisture, prevent extreme soil temperatures, reduce winter injury, enhance soil fertility, and protect against lawn mowers.

Apply in a circle at least three feet wide; the wider the better. Mulch should be minimal near the trunk and gradually increase to four inches around the outer rim of the mulch.

If mulch is heaped near the trunk,

it will cause trunk rot and encourage rodents to nest nearby.

Rock mulch is not recommended. It traps heat and creates leaf scorch. Its weight will compact the soil. The jagged edges can damage tree bark.



## EMERALD ASH BORER

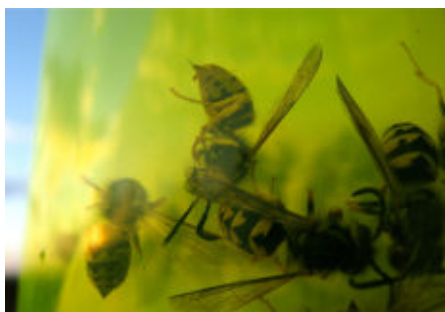
We have not detected EAB in ND. The borer has killed millions of ash trees since invading MI in 2002. It was detected in St. Paul in 2009 and is quarantined in 8 counties of the

Twin Cities and southeastern MN.

Quarantine programs are slowing the spread of EAB. A load of contaminated firewood may have brought the pest to CO, but it has not been detected in ND, SD, MT, Manitoba or Saskatchewan. The pest

might be here or it might not become established in ND for decades. The pest struggles under frigid temps. State agencies are scouting for EAB.

No treatments are recommended until EAB is confirmed within 15 miles. Do not transport firewood.



## MANAGING WASPS

Wasps get more aggressive as populations soar in August. Avoid problems by keeping garbage containers tightly closed. Wasps can be trapped but this fails to kill the

queen and there may be thousands of wasps in a nest.

Locate the nest and determine if the nest is a hazard or not. If an aboveground hazard, shoot a knockdown spray into the hole of nest. If below ground, sprinkle a

disposable cup of carbaryl (Sevin) dust near or in the hole.

Kill wasps at night. Wasps are less active when temps are 50s or colder. Wear protective clothing. Left alone, wasp nests will die after a hard frost.

# Problems found in North Dakota yards and gardens:

## VEGETABLES



**Fig. 15. Blossom end rot**

Caused by calcium deficiency; prevalent on first fruits. Keep soil moist and do not damage roots when cultivating. Mulch vines. Root growth will lead to more calcium uptake. Calcium sprays are not needed.



**Fig. 16. 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.



**Fig. 17. Tomato leaf roll**

Leaves curl upward to conserve moisture. Leaves become tube-shaped and leathery. This disorder is related to hot, dry weather and/or fast growth and high fruit set. Does not affect yield; no treatment needed.



**Fig. 18. Septoria on tomato**

Small (1/8-inch), numerous spots begin on lower leaves. Remove infected foliage. Avoid getting foliage wet. Fungicide sprays (chlorothalonil, mancozeb, copper) prevent spread.



**Fig. 19. Early blight on potato**

Brown lesions with rings inside. Remove infected foliage. Protect with fungicides chlorothalonil, mancozeb, or copper. Avoid overhead irrigation. Clean up garden. Look for resistant varieties.



**Fig. 20. Potato scab**

Bacteria create scars on tubers. Peel off scars. In future, prevent scab by keeping soil evenly moist for 4–6 weeks after flowers appear. Avoid fresh manure. Use resistant varieties: 'Redgold', 'Superior' and 'Goldrush'.



**Fig. 21. Blooming onions**

Bolting occurs when sets are sown or when onion plants are stressed (often due to night temps in the 40s). Harvest and use promptly. Flowering onions will not store over winter.



**Figs. 22, 23. Cabbageworms**

Moths lay eggs on cabbage, kale and broccoli. Larvae consume crops. Spray with *Bacillus thuringiensis* while larvae are small. Carbaryl, pyrethrins or spinosad will control mature larvae.



**Fig. 24. Blights on cucurbits**

Rains and dews provide moisture that promotes fungi. Avoid overhead irrigation. Prevent spread with chlorothalonil, mancozeb or copper. Use disease-resistant varieties.

# More problems found in North Dakota yards and gardens:

## TREES



**Fig. 25. Fall webworm**

Caterpillars eat leaves but cause little long-term damage to trees. Larvae are young and may be controlled with *Bacillus thuringiensis* (Dipel, Thuricide) or carbaryl (Sevin).



**Figs. 26, 27. Heat scorch**

Heat and brisk winds can cause leaves to scorch along edges. Newly planted trees are especially sensitive. Irrigate deeply. Rock mulches generate heat and should be avoided; shredded bark mulch is superior for plant health.



**Fig. 28. Root girdling**

Roots (sometimes several inches below ground) strangle trunks. Tree die back. Notice the lack of root flare at trunk base. Associated with planting trees too deeply. Treatment is difficult, if not impossible in most cases.

## FRUITS



**Fig. 29. Spotted wing drosophila**

Tiny white maggots appear in fruits. Set out traps with apple vinegar to monitor. Spray if needed. Harvest regularly. Keep orchard clean of weeds and culled fruits.



**Fig. 30. Cracked apples**

A rush of water into fruits causes skins to erupt. Related to heavy rains after a span of dry weather. Cracked fruits are subject to disease. Do not use infected fruits. Maintain uniform soil moisture. Irrigate trees if dry. Use bark mulch.



**Fig. 31. Cedar apple rust**

Rust comes from junipers. In March, prune apples to increase air movement in canopy. Apply fungicides, especially when rain is expected, every 10–14 days; begin when blooms show pink and continue for 30 days after petal fall.

## MISCELLANEOUS



**Fig. 32. Sunflower rust**

Heavy dews, frequent rains and warm temps led to this. Disease starts on lower leaves. Avoid overhead irrigation. Space plants for good ventilation. Clean up garden in fall.



**Fig. 33. Foxtail**

Annual grass will die from frost. Mow foxtails growing in the lawn, or pull plants from the garden to prevent seed dispersal. In lawns, apply fertilizer with crabgrass preventer next spring.



**Fig. 34. Crickets**

Seal windows, doors and foundation. Reduce outdoor lighting. Remove debris near foundation. Insecticides may be sprayed near entries. Crickets die from frost. They will starve if they get indoors.

# Weather Almanac for July 31–August 9, 2015

Site	TEMPERATURE				RAINFALL				GROWING DEGREE DAYS <sup>1,2</sup>			
	Jul 31–August 9				Jul 31–Aug 9		2015		Jul 31–Aug 9		2015	
	Avg	Norm	Max	Min	Total	Norm	Total	Norm	Total	Norm	Total	Norm
Bottineau	65	69	88	41	0.33	0.67	7.72	12.37	141	171	1344	1413
Bowman	70	71	98	49	1.11	0.46	10.30	11.22	173	189	1349	1432
Carrington	66	70	85	46	0.49	0.75	11.98	13.55	143	180	1424	1534
Crosby	67	68	94	49	0.27	0.54	7.36	10.72	148	162	1367	1297
Dickinson	71	70	96	47	0.23	0.57	8.92	11.92	183	185	1442	1424
Fargo	70	71	86	47	1.38	0.71	15.17	14.11	178	189	1637	1649
Grafton	66	68	87	46	0.30	0.87	16.26	13.13	148	164	1465	1428
Grand Forks	68	69	88	47	0.09	0.87	9.86	13.14	159	171	1515	1469
Hazen	68	72	94	44	0.10	0.58	8.90	11.89	165	189	1418	1574
Hillsboro	67	70	85	46	0.11	0.81	11.49	13.95	155	185	1506	1554
Jamestown	68	70	88	50	0.13	0.63	15.08	12.93	161	183	1550	1527
Langdon	64	66	83	46	0.04	0.87	10.36	13.10	129	147	1307	1217
Mandan	70	71	91	51	0.15	0.82	12.10	12.52	175	189	1516	1514
Minot	67	69	88	52	0.10	0.65	11.62	12.60	152	171	1446	1384
Mott	70	71	95	47	1.38	0.49	11.81	11.78	171	188	1414	1490
Rugby	66	69	89	48	0.00	0.81	8.89	13.69	147	168	1397	1416
Wahpeton	68	72	86	45	0.18	0.66	11.95	13.97	171	198	1570	1714
Watford City	71	70	99	51	0.51	0.51	7.99	10.62	180	185	1515	1452
Williston	72	73	99	53	0.24	0.52	7.26	10.07	187	198	1550	1626
Wishek	69	69	88	50	0.24	0.81	11.84	14.41	169	170	1439	1375

## DAYLENGTH (Aug. 11, McClusky, center of ND)<sup>3</sup> LONG-TERM OUTLOOKS<sup>4</sup>

Sunrise: 6:32AM | Daylength: 14h 31m | Aug. 16–20: Temp: Normal; Precipitation: Above Normal  
 Sunset: 9:03PM | Change since July 31: –30m | Aug. 18–24: Temp: Normal; Precipitation: 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, and National Weather Service, respectively.

## Credits

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