

# YARD & GARDEN REPORT

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## “Blueberries” for North Dakota

Blueberries are delicious—but they are almost impossible to grow in North Dakota.

We don't have the proper soil to grow blueberries. Blueberries demand a very acidic soil (pH 4.5–5.5). This is rare in our state. Most of us have a prairie soil that is neutral to slightly alkaline (pH 7.0–8.5). Blueberries will starve in these soils.

Our winters are too harsh to grow blueberries. In the northern regions of our state (Zone 3), it is too cold to grow blueberries. The plants will freeze to death.

In the warmer regions (Zone 4), the plants can die unless they are blanketed with snow. Snow is unpredictable in our state, to say the least.

Although it is very tough to grow real blueberries here, we can grow other fruits that look and taste like blueberries.

Canadian haskaps (*Lonicera caerulea*) are very easy to grow. These blue-fruited honeysuckles (*Fig. 1*) thrive in our prairie soils. Millions of haskaps are planted in the Canadian prairie provinces. The plants are hardy to  $-40^{\circ}\text{F}$ . The spring-flowering shrubs grow up to 4 feet tall and require little care.

Haskaps are delicious. Their taste has been likened to a blueberry with essences of raspberry, black currant and/or blackberry. Its texture is like a blueberry. The skin is thin and the seeds are tiny and edible. The berries are eaten fresh, baked into pies, made into jams, or frozen and sprinkled onto ice cream.



*Fig. 1. Haskaps are easy to grow.*

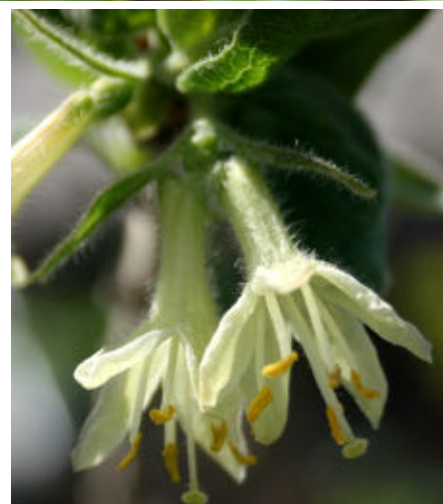
This year's haskaps are being harvested now. You can expect two pounds of berries per bush after three years, and sometimes double that yield as the plant matures.

Haskap varieties from the University of Saskatchewan are recommended for their superior flavor. 'Borealis' has juicy fruits and is a great choice for gardeners. Sprinkle a few 'Berry Blue' or 'Cinderella' plants in the row for pollination.

Birds love haskaps, too. Be prepared to put netting over the shrubs when berries show blue color.

Forget about growing blueberries and stop challenging the powers of Mother Nature. Grow haskaps instead. *Cooperate* with Mother Nature and you will be successful.

Go to University of Saskatchewan and NDSU Hardy Fruits Project websites for more information.



*Fig. 2. Haskap flowers look delicate but are superhardy.*

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## Twisted tomatoes and taters

Unexpected twists and turns such as hail or drought can make a gardening season memorable. But when *our plants* are doing the twisting and turning, this is a nightmare!

Herbicide injury is the #1 threat to gardens right now. The damage is usually caused by accidental drift of lawn herbicides. Contaminated manure and straw are other emerging threats (see next article).

Once affected, there is little you can do. You cannot wash the chemical off your plants. Once you see curling, the chemical has been absorbed into the plant, including the harvested portions.

Then you are faced with the inevitable question as to whether or not the produce is safe to eat.

There are no easy answers here. It depends on the concentration, toxicity and persistence of the chemical. As the summer progresses, the herbicide concentration may decline, but the chemical can still be there. Laboratory tests are valuable; however, these tests are very expensive and not readily available.

Acute poisoning from vegetables affected with herbicide drift is unlikely, but long-term effects such as developing cancer are difficult to assess (Masiunas, 2012). It makes sense to minimize our exposure to toxic chemicals and not to consume herbicide-tainted vegetables.

**Avoid spraying herbicides when your garden is growing.**

**Do not use lawn clippings or straw unless you know the history of their exposure to herbicide.** In most cases, lawns should be mowed at least three times before using the clippings for mulch.



Figs. 3, 4. Curled leaves and twisted vines of tomato and potato.

## Herbicides in manure and straw

Aged manure and straw mulch are great for gardens—unless they are full of herbicide.

Pyridine herbicides are widely used to control weeds in pastures. Straw and manure from a pyridine-treated pasture are hazardous.

The herbicide can persist in straw for months or longer. When pyridine-treated grass is consumed by livestock, the pyridine can pass through the animal's system without breaking down. When you add such manure to your garden you are adding the herbicide along with it.

Tomato, potato, pepper, bean and pea are especially sensitive to pyridine, but other vegetables including carrot, lettuce, spinach and beet are also sensitive. Rose, dahlia, and annuals such as marigold and sunflower are sensitive.

Pyridine chemicals may break down in a few weeks or, in some cases, in a few years. Gardeners who suspect their soil is contaminated can test their manure by

growing beans in pots containing a 1:1 mixture of the manure with potting soil. If the potted beans grow well, the pyridine has broken down to acceptable levels.

Another way to monitor for pyridine in your garden is to grow short rows of beans and peas scattered throughout the garden. Monitor for unusual growth (Davis et al., 2010).

If you get your manure or straw from a farmer, ask them about their use of herbicides. There are reports of suspected contamination of compost/manure from municipal recycling centers and garden centers in ND, too.





## SUMMER LAWN CARE

Lawns struggle when summer temps rise. You can let your lawn turn yellow and go dormant. It will rest until the temps cool in fall. Mow the turf tall and let grass clippings fall. This will

shade the soil and keep it cool.

Water is needed to keep a lawn green. About 1 inch of water from rain and/or irrigation is needed per week. Irrigate weekly for clay soil; split the watering in half and apply twice on

sandy soils. Deep watering promotes deep roots. Early morning is best.

A half-strength fertilization can be applied; organic fertilizers will not burn. Avoid herbicides; they stress the turf and can drift to the garden.

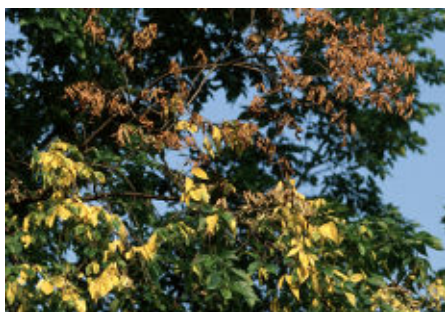


## APPLE MAGGOT CONTROL

The apple maggot is the #1 pest of apples in ND. Females lay eggs in apples beginning in July. These eggs hatch into tiny, translucent larvae that create tunnels inside the fruit.

Monitor for flies by hanging traps in trees. Traps are available online or make your own (3+ inch diameter, bright red wooden spheres). Cover with Tanglefoot sticky material. Hang on the outside of the tree facing a wooded area or on the south side.

Flies are smaller than a housefly and have dark markings on wings. If the flies are trapped, consider protecting fruit with sprays of esfenvalerate, carbaryl or spinosad. Clean traps weekly. Monitor and spray as needed.



## DUTCH ELM DISEASE

Initial signs often appear this time of year. Look for a major branch in the upper crown that is turning yellow and wilting. This is called a "flag branch." Contact your city forester or

professional arborist immediately. Look for brown streaking beneath bark and in sapwood.

Removal of an infected tree is the most effective option, especially if multiple branches are affected. Burn,

bury or chip wood to prevent disease-carrying beetles from breeding in it.

Varieties that show resistance to Dutch elm disease are available. These include Prairie Expedition®, Jefferson, Cathedral and Triumph™.

# Problems found in North Dakota yards and gardens:

## TREES AND SHRUBS



**Figs. 15, 16. Aphids**

Leaves curl. Pry open the leaf to reveal pests. The excrement is sticky and glistens. Damage is minor. Jet spray with water. Spray of systemic acephate may be justified for young trees.



**Fig. 17. Ash rust**

Orange lesions and galls appear on ash. Damage is minor and no treatments are needed. Rust spores came from cordgrass or marsh grass.



**Figs. 18, 19. Spruce sawfly**

Yellowheaded spruce sawfly defoliates spruce, beginning with young needles. Insecticidal soap kills young larvae. Carbaryl, acephate or cyfluthrin is recommended for large infestations.



**Fig. 20. Pear slugs**

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



**Fig. 21. Chokecherry shotholes**

Disease lesions drop out of leaves, creating holes. Rake leaf litter. Avoid irrigating foliage. Inspect branches for cankers; remove if found.



**Fig. 22. Gall on viburnum**

Eriophyid mites feed on leaves in early spring. This causes a hormonal reaction, leading to leaves curling and developing pink streaks. Damage is cosmetic. No pesticides are needed.

## GARDENS AND LAWNS



**Fig. 23. Bolted spinach, radish**

Cool-season crops will go to seed in response to heat. In the future, mulch to keep soil cool. Use bolt-resistant varieties. Sow new crop for fall harvest.



**Fig. 24. Spittlebugs**

Pale green nymphs cover themselves with a frothy mass to protect against sun and predators. Spittlebugs usually cause little harm. Spray with water.



**Fig. 25. 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 19–June 25, 2015

Site	TEMPERATURE				RAINFALL				GROWING DEGREE DAYS <sup>1,2</sup>			
	Week				Week		2015		Week		2015	
	Avg	Norm	Max	Min	Total	Norm	Total	Norm	Total	Norm	Total	Norm
Bottineau	63	65	81	48	1.00	0.96	6.04	8.41	84	92	558	596
Bowman	65	64	83	50	1.04	0.69	7.58	8.21	88	89	517	544
Carrington	67	66	83	52	1.54	0.88	6.94	8.88	98	100	594	640
Crosby	65	63	82	49	0.30	0.74	5.60	6.87	93	81	565	535
Dickinson	66	64	84	49	1.92	0.87	5.86	8.25	94	87	550	571
Fargo	69	68	86	53	0.72	0.94	10.95	10.04	110	110	676	697
Grafton	66	68	82	51	0.39	0.96	9.32	8.94	94	112	600	707
Grand Forks	66	66	83	50	0.58	0.88	6.41	8.59	98	97	640	627
Hazen	65	66	84	45	0.62	0.86	7.58	8.33	93	98	573	668
Hillsboro	68	67	86	52	1.65	0.91	8.72	9.31	105	103	645	650
Jamestown	68	67	83	54	1.68	0.87	11.35	8.48	109	100	637	623
Langdon	63	63	80	50	0.62	0.98	7.52	8.45	86	80	540	500
Mandan	67	66	84	50	1.91	0.81	9.46	7.97	99	99	619	602
Minot	67	65	81	53	3.76	0.82	9.46	8.90	101	92	577	559
Mott	66	65	83	49	1.95	0.73	10.14	8.63	91	93	560	590
Rugby	65	65	82	51	1.45	0.85	6.38	8.98	94	91	564	608
Wahpeton	69	69	85	53	0.72	0.83	8.90	9.56	110	113	670	741
Watford City	67	65	84	50	1.11	0.76	5.34	7.06	101	88	597	583
Williston	67	67	84	50	0.10	0.71	4.69	6.68	102	104	607	676
Wishek	66	65	80	52	1.11	0.91	10.31	9.98	97	89	564	546

## DAYLENGTH (June 25, McClusky, center of ND)<sup>3</sup>

Sunrise: 5:45 AM | Daylength: 15h 58m  
 Sunset: 9:43 PM | Change since June 18: +1m

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

6–10 Day: Temp: Normal; Precipitation: Below Normal  
 8–14 Day: Temp: Below 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](http://www.sunrisesunset.com), and National Weather Service, respectively.

## Credits

### Sources:

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