

## Backyard Camping

Summer is here and camping season is in full swing. One of the joys of camping is sitting around a campfire, watching the blazing embers and sharing stories (and smores).

You can start a campfire in your own garden today. Grow a Campfire rose, a remarkable shrub from Canada.

The tradition of outstanding Canadian roses is well established. The Explorer and Parkland Series are widely grown in North Dakota today. Popular varieties include Champlain, Morden Centennial, Winnipeg Parks, and Hope for Humanity.

Now comes the Canadian Artists Collection. These roses have been developed to be more reliable, more resistant to diseases, and bloom more continuously than Canadian roses of the past. Among the varieties in this new collection, First Editions® Campfire is receiving rave reviews.

Campfire is exceptionally hardy (Zone 3). This 3-foot-tall shrub grows on its own roots and can withstand North Dakota winters without protection.

Its leaves are deep green and glossy. They show strong resistance to diseases—a notable improvement over many Canadian roses. Its stems are smooth with only a few short thorns, making it less hazardous to care for these shrubs in the garden.

The flower buds appear in brilliant shades of yellow and red, opening



Photos courtesy of Bailey Nurseries, Inc.

*Campfire is a hardy, carefree rose that will brighten your landscape.*

into yellow blooms edged in rosy pink. As the blooms age, shades of pink dominate the petals. This aging effect creates an eye-catching mix of colors in the shrub as new blooms appear. Its major drawback: The blooms have little to no fragrance.

Many rose experts believe Campfire is one of the finest roses to come out of Canada.

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# Drought Watch

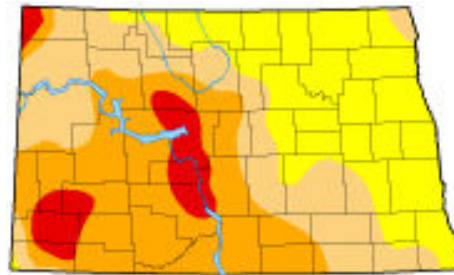
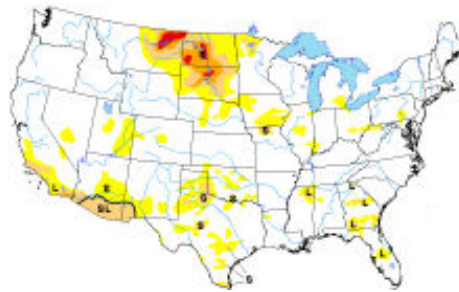
Nobody in the USA is suffering more from drought than us (*top left map*). Over 99% of North Dakota is in a short-term drought and the central region has pockets of extreme drought (*bottom left map*).

While a scattering of rains fell across northern and eastern portions of our state recently, the drought status in other areas worsened. See page 5 for details in your region.

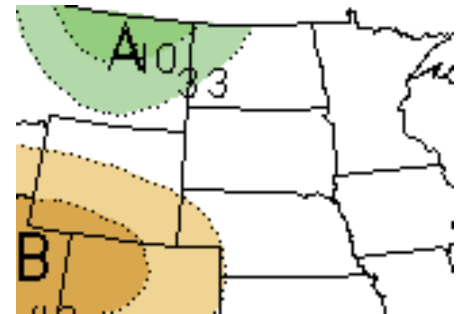
The western part of the state receives much of its participation from April to July, so the lack of rain received to date may have pronounced effects in the future.

Looking ahead, the outlook for July looks positive in northwest North Dakota and the three-month forecast (July–September) looks good for all of the state.

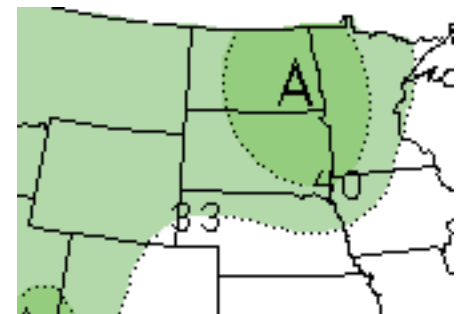
Water conservation strategies were covered in the June 9, 2017 edition of the NDSU Yard & Garden Report.



- Moderately dry (*crop growth slowed*)
- Moderate drought (*damage to crops*)
- Severe drought (*crop losses likely*)
- Extreme drought (*major crop losses*)



July 2017



July–September 2017

*The Northern Great Plains is suffering from drought. Top right map: In July there is a 33% probability that northwest ND will receive above normal precipitation (green area). Bottom right map: From July through September, our entire state has a 33–40% probability of above normal precipitation.*

# Wormfree Apples

Nobody likes wormy apples ... but nobody enjoys spraying pesticides. What's the solution?

Spray only when needed.

The apple maggot is the #1 pest of apples in North Dakota. The egg-laying flies begin attacking our fruits in early July. Now is the time to set up traps to monitor for the flies.

Apple maggot traps are available at major garden centers and online. These plastic spheres are coated with the sticky substance Tanglefoot and hung in trees. The flies are attracted

to the red spheres and will get stuck when they land on them.

You can make your own 3-inch-diameter spheres out of wood and hang them using an eye screw and wire hook. Another option is to use bright red apples, skewer them with a thick wire (or coat hanger) and hang them up. Coat them with Tanglefoot.

Small trees need a couple traps and full-sized trees can use five traps. Hang them on outer branches, placing at least one on the south side and on branches facing brushy areas.



Check every week. If you don't see any flies, you don't need to spray.

If you do see flies, you have a choice to make: Spray to protect your fruits or get ready to make a lot of maggot-rich applesauce this fall.

# Chores & Challenges

## Trees & Shrubs: Chores



### Watering Young Trees

Newly planted trees may lose 95% of their roots from the nursery field to your yard. They require your attention, especially during this drought.

**How often should I water?** For the first summer, trees can be watered every 2–3 days when needed. In future years, the tree should be monitored weekly until it's overcome its shock.

**How long is a tree in shock?** A young tree suffers 1.0 to 1.5 years for

every inch of its trunk caliper (measured at 6 inches above ground).

**How much water?** One rule of thumb is a tree requires 10 gallons of water per week for every inch of caliper. If you water about 3 times a week, then a tree would get 3.3 gallons per inch of its caliper during each irrigation.

Water only if the soil is dry. Get a metal rod and check 8 inches deep. Keep the soil moist but not soggy.

### Mulching Benefits and Tips

Organic mulch (shredded bark and wood chips) conserve moisture. Mulch reduces weed problems and protects the trunk from lawn mowers. Mulch insulates the soil, protecting the plant from extreme hot and cold temps.

When applying mulch, use the 3-3-3 rule: apply it 3 inches deep, keep it 3 inches away from the trunk and in a ring at least 3 feet in diameter. Heaping mulch around the trunk can lead to rodent infestation and trunk rot.

## Trees and Shrubs: Challenges



### Galls on Leaves

Bumps were caused by piercing mites or insects. These pests are gone; thus pesticides are not useful now. Although dramatic, these galls rarely cause significant stress to the tree.



### Summer Leaf Drop

Trees lose water through their leaves so they may drop a few (5% or so) to conserve water. A scattering of leaves will turn yellow and drop. No treatment is needed but watering helps.



### 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.

# Chores & Challenges

## Fruits



### Shothole Disease

Infected spots fall out of plum and chokecherry leaves. Rake leaf litter. Keep foliage dry. Inspect branches for cankers (see arrow); remove if found.



### Plum Pockets

Unripe fruits become large, hollow and spongy. Remove infected fruits before spores emerge. Prevent with a spray of chlorothalonil, Bordeaux mix or lime sulfur before bud break in spring.



### Rhubarb Harvest

Harvest rhubarb until July 4. Then allow plant to replenish its crown for next year. A few stalks can be harvested this summer if needed. These stalks will be less tender but still edible.

## Vegetables



### Asparagus Harvest

Stop harvesting when 75% of spears become thinner than a pencil. The remaining spears will turn into ferns that provide energy for next year's crop.



### Early Blight on Tomato

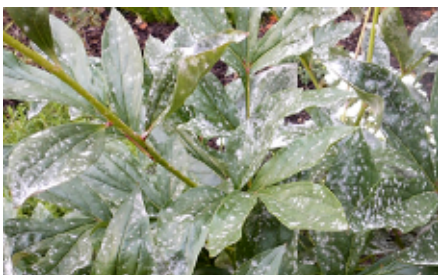
Brown spots appear on stems and leaves. Note the concentric rings in spots. Prevent spread with fungicide sprays (mancozeb, chlorothalonil, copper). Keep foliage dry. Stake plants.



### Save Seeds

Most seeds stay vigorous for 3 to 5 years. Store seeds in a jar and set in a refrigerator or other cool place. Use fresh seed of corn, onion and parsley every year, if possible.

## More Challenges



### Powdery Mildew on Peony

Avoid getting foliage wet. Clean debris in fall. Scout for mildew early next spring and use fungicides to prevent its spread. Consider dividing plants in fall to promote better air flow in planting.



### Thistle

Cut down to prevent seed dispersal; expect plants to resprout. Spot spray with dicamba or glyphosate. Fall applications are best at moving herbicide throughout its roots.



### Field Bindweed

Creeping perennial with spade-shaped leaves and white/pink blooms. Its deep roots make pulling difficult. Spray with quinclorac or dicamba in lawns; use glyphosate in gardens. Fall is best.

# Weather Almanac for June 19–June 25, 2017

Site	TEMPERATURE				RAINFALL				GROWING DEGREE DAYS <sup>1,2</sup>			
	June 19–25				June 19–25		2017		June 19–25		2017	
	Avg	Norm	Max	Min	Total	Norm	Total	Norm	Total	Norm	Total	Norm
Bottineau	56	65	76	39	0.38	0.96	2.89	8.41	51	92	608	596
Bowman	60	64	84	38	0.05	0.69	2.47	8.21	77	89	688	544
Carrington	59	66	84	40	0.09	0.88	5.04	8.88	60	100	668	640
Crosby	59	63	76	41	0.13	0.74	2.74	6.87	61	81	661	535
Dickinson	62	64	85	40	0.00	0.87	2.40	8.25	78	87	706	571
Fargo	62	68	88	43	0.00	0.94	3.81	10.04	75	110	756	697
Grafton	59	65	83	39	0.12	0.94	4.18	8.94	61	94	649	615
Grand Forks	61	66	85	44	0.23	0.88	4.83	8.59	69	97	722	627
Hazen	60	66	83	34	0.01	0.86	2.11	8.33	74	98	725	668
Hillsboro	61	67	87	43	0.06	0.91	3.33	9.31	71	103	703	650
Jamestown	60	67	87	43	0.35	0.87	4.56	8.48	64	100	650	623
Langdon	56	63	77	39	0.12	0.98	3.89	8.45	46	80	522	500
Mandan	60	66	88	38	0.00	0.81	2.46	7.97	73	99	727	602
Minot	59	65	77	43	0.02	0.82	2.57	8.90	63	92	652	559
Mott	60	65	87	35	0.00	0.73	2.21	8.63	74	93	688	590
Rugby	58	65	79	40	0.14	0.85	4.06	8.98	60	91	643	608
Wahpeton	61	69	86	41	0.21	0.83	6.71	9.56	75	113	743	741
Watford City	61	65	79	40	0.00	0.76	3.38	7.06	70	88	681	583
Williston	61	67	82	41	0.27	0.71	2.30	6.68	71	104	709	676
Wishek	60	65	91	38	0.07	0.91	2.32	9.98	67	89	654	546

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

Sunrise: 5:46 AM      Daylength: 15h 57m  
 Sunset: 9:43 PM      Change since June 19: -1m

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

July 01–05: Temp.: Normal; Precip.: Above Normal  
 July 03–09: 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

Sources:

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University of Minnesota. Apple maggot. [www.extension.umn.edu/garden/yard-garden/fruit/apple-pest-management/maggot/](http://www.extension.umn.edu/garden/yard-garden/fruit/apple-pest-management/maggot/).

University of Nebraska. Drought monitor. [droughtmonitor.unl.edu/Home.aspx](http://droughtmonitor.unl.edu/Home.aspx).

Photos were made available under Creative Commons licenses specified by the photographers. **Page 1.** Bailey Nurseries, Inc.; **Page 2.** Drought Monitor, [droughtmonitor.unl.edu/Home.aspx](http://droughtmonitor.unl.edu/Home.aspx) (2); National Oceanic and Atmospheric Administration Climate Prediction Center, [www.cpc.ncep.noaa.gov/products/forecasts/](http://www.cpc.ncep.noaa.gov/products/forecasts/) (2); Joseph Berger, [Bugwood.org](http://Bugwood.org); Cornell University, [blogs.cornell.edu/jentsch/scouting-reports/](http://blogs.cornell.edu/jentsch/scouting-reports/); **Page 3.** Trees on Wheels,

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Written by Tom Kalb, who expresses gratitude to the NDSU educators who contributed to this report: Kelsie Egeland, Ken Erasas, Randy Grueneich, Bill Hodous, Angie Johnson, Scott Knoke, Julie Kramlich, Joel Lemer, Esther McGinnis, Jesse Ostrander, Julianne Racine, Steve Sagaser, Alyssa Scheve, Yolanda Schmidt, Todd West, Megan Vig and Todd Weinmann.

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