

## Ash Disease Outbreak

Cool, wet weather this spring has created an outbreak of disease on ash trees in southern ND. Don't worry—established ash trees can tolerate this.

Anthracnose disease first appears as brown spots on young shoots and leaves. Brown blotches develop along the margins of leaves and cause leaves to curl. Infected leaves may drop.

The fungus thrives in shade and humidity. For that reason, lower and shaded branches are more likely to be infected. The top of the tree will be healthiest since it gets good sunlight and air movement.

This fungus will not spread to other types of trees and shrubs.

What should we do about it? Don't panic—you might be under more stress than the tree. Step back and look at your tree. It is full of green leaves producing lots of nutrients for your tree. Trees can readily tolerate up to 25% defoliation and come back strong.

It would take several consecutive years of infection to seriously weaken the tree. This is not likely to occur. Our last outbreak was in 2015.

The disease survives on fallen leaves and infected branches. Rake the leaves and prune unhealthy branches to reduce the presence of the disease in future years.

Spraying fungicides to prevent the spread of anthracnose on tall trees is



*Infected leaves develop brown lesions and may later curl and drop.*

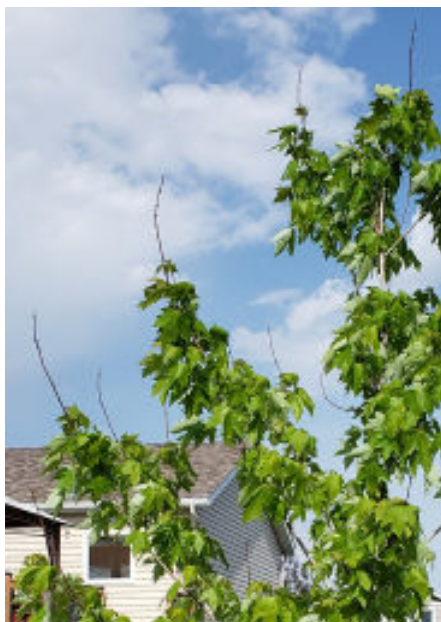
not practical, especially since the disease is not life threatening. Spraying young trees makes more sense, but there aren't many young ash trees in landscapes since nurseries stopped selling them due to emerald ash borer.

If you have not fertilized your lawn under the tree this spring, an application of 4 pounds of lawn fertilizer per 1000 square feet under the tree's canopy can promote new growth.

### Inside This Issue

- ◆ Falling Ash Leaves 1
- ◆ Recovering From Winter 2
- ◆ Plant Health Care
  - ◆ Trees & Shrubs, Lawns 3
  - ◆ Fruits & Vegetables, Misc. 4
- ◆ Weather Almanac 5

# Recovering From the Frigid Winter



## Dieback

Upper branches of many leafy trees died back. Shown here is ‘Autumn Blaze’ maple, one of the most popular shade trees in North Dakota.

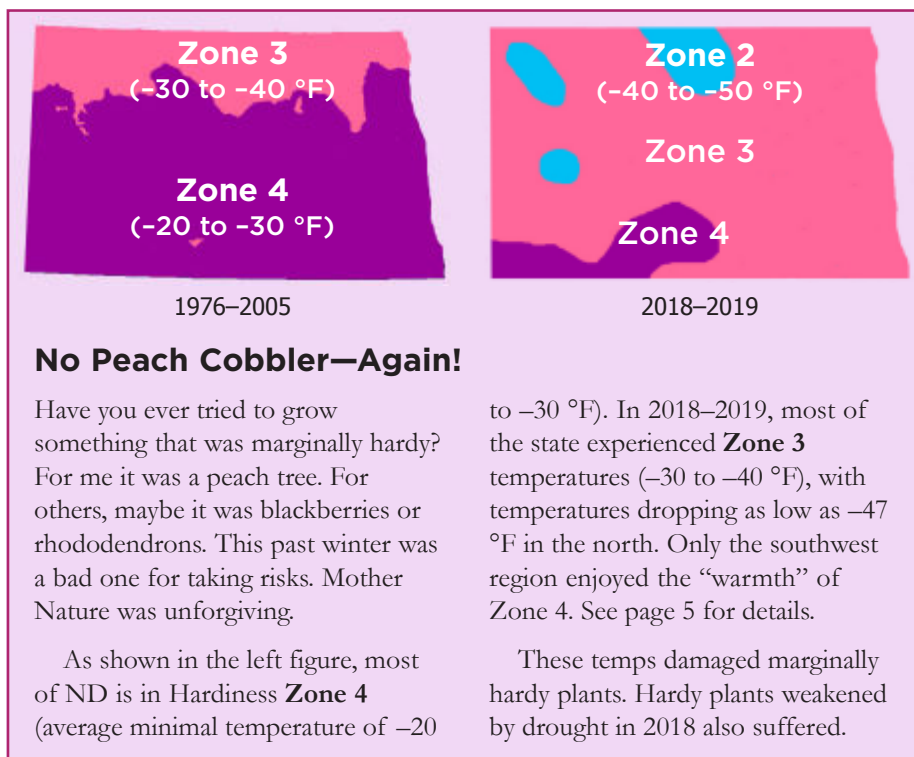
Trim back dead shoots. Know your hardiness zone and plant hardy trees.

Studies have shown that Freeman maple trees suffer less winter damage when mulched. Wood mulch will insulate roots, conserve moisture, and prevent tree bark being wounded by mowers and weed whips.



## Dead or Alive?

Use a knife or thumbnail to scratch the young bark. If you see green tissue (shown at right), there is life in the tree. Be patient and hope for the emergence of new buds.



## Winter Kill on Evergreens

Focus on branch tips. Evergreen *needles* are exposed to the drying winds of winter. Exposed needle tips may turn brown.

*Buds* are more protected over winter and often escape damage, as shown here. If new shoots emerge, the tree can outgrow the problem. If not, the branch may be dead and require removal.



## Dead Spots in Lawns

Lawns that were weak heading into winter—from drought, thatch or grubs— may show dead spots. Rake the soil and sow seed. Fertilize and keep it moist until the spots fill in.



## Delayed Plantings

Unusually cold temperatures and blizzards in May surprised us—and the robins! Planting was delayed for weeks. Let's get busy now!

# Plant Health Care

## Trees and Shrubs



### Remove Tree Guards

Tree guards during summer can strangle trunks, reduce growth, promote trunk rot and provide shelter to insect pests. Replace guards after leaves drop in fall.



### Cankerworms

Caterpillars are defoliating linden, oak, elm, maple and other leafy trees. Trees are weakened but will recover with new leaves later this year. Insecticides are rarely needed unless significant damage occurs three or more years in a row.



### Messy Crabapples

Fallen crabapples in autumn create a mess on sidewalks and patios. Carbaryl insecticide will abort fruits less than 3/5 inch in diameter. Spray after petal fall. Ethephon can be added to increase thinning.



### Pinch Mugho Pines

Two-thirds of the new growth of mugho pine shrubs can be pinched back to give the plants a fuller and more formal appearance. Spruce or pine trees generally do not need pruning.



### Prevent Emerald Ash Borer?

Do not apply insecticides to ash trees to prevent emerald ash borer. The borer has not been detected in ND. You are wasting money and exposing yourself and the environment to poison.

## Lawns



### Fertilize

Lawns are growing and late May/early June is a good time to fertilize it. Fertilizing done earlier in the spring promotes quicker greening and top growth, but has little long-term benefit (unless you enjoy mowing).



### Mow Tall

Cut at the highest height you can accept (at least 2.5 inches). Tall lawns develop deep root systems, smother emerging weeds and keep the soil cool. Tall lawns stay green longer into the summer compared to short lawns.



### Clippings in the Garden?

Did you spray your lawn with a herbicide to kill dandelions? Read the label before using the lawn clippings in the garden. Many herbicides contain dicamba, and their labels may recommend NOT using clippings in flower and vegetable gardens.

# Plant Health Care

## Fruits and Vegetables



### Harvesting Asparagus

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.



### Flea Beetles

Tiny (1/8-inch) pests create shotholes in radish and leafy greens. Young seedlings are very sensitive. Consider spraying insecticide if 10–30% of leaf tissue is damaged.



### Cedar Apple Rust

Slimy galls on junipers (cedar) are spewing rust onto leaves of apples and crabs. Mature trees tolerate this rust. Young or highly susceptible trees may be sprayed with fungicide to reduce infection. Spray before rain is expected.



### Leaf Scorch

Young leaves turn white, especially along margins. Burning was caused by intense sun when leaves emerged. Future leaves will be healthy. No treatment is needed.



### Damping Off

Anxious gardeners may have sowed seeds a little early this year. Seeds of melons, cucumber and super sweet corn are very sensitive to cool soil temps. Poor stands may occur and replanting may be needed.

## Miscellaneous Pests



### Ground Squirrels

These rodents damage garden plants and dig holes in lawns. In gardens, use rat traps baited with peanut butter. Zinc phosphide baits are used in noncrop areas. Flood burrows. Use live traps.



### June Beetles

June beetles are flying, bumping into lights and walls. They will lay eggs that hatch into grubs that harm lawns and gardens. Reduce beetle populations in your yard by turning off yard lights.



### Ants in the Kitchen

Ants invade homes in spring because food sources outside are limited. Seal cracks along doors and windows. Use ant baits or spray a 3-foot-swath of insecticide along the home's perimeter.

# Weather Almanac

Site	TEMPERATURE <sup>3</sup>					RAINFALL <sup>3,6</sup>				GROWING DEGREE DAYS <sup>3,7</sup>			
	Coldest	June 1–8				June 1–8		2019		June 1–8		2019	
		Avg	Norm	Max	Min	Total	Norm	Total	Norm	Total	Norm	Total	Norm
Bottineau	-44 <sup>1</sup>	65	60	93	35	0.90	0.91	2.46	4.22	118	80	356	357
Bowman	-27 <sup>2</sup>	61	59	86	37	0.32	0.86	5.22	4.56	98	74	255	320
Carrington	-40 <sup>1</sup>	68	61	96	38	0.18	1.00	2.56	4.93	129	86	343	379
Crosby	-39 <sup>2</sup>	65	59	92	39	0.29	0.73	1.86	3.70	117	75	340	323
Dickinson	-30 <sup>2</sup>	64	59	87	36	0.21	0.93	4.76	4.59	110	79	288	345
Fargo	-34 <sup>1</sup>	72	63	96	44	0.33	0.98	4.03	5.15	154	97	382	410
Grafton	-35 <sup>1</sup>	67	61	98	35	1.28	0.87	3.11	4.62	127	84	359	370
Grand Forks	-32 <sup>1</sup>	68	61	95	41	1.44	0.84	4.54	4.53	136	84	362	376
Hazen	-33 <sup>2</sup>	64	62	88	37	0.21	0.88	4.10	4.83	115	90	318	413
Hillsboro	-38 <sup>1</sup>	71	62	96	43	0.56	0.89	3.55	4.99	145	88	377	381
Jamestown	-33 <sup>1</sup>	67	62	92	42	0.52	0.86	3.51	4.68	130	84	326	365
Langdon	-40 <sup>1</sup>	65	58	95	36	0.44	0.94	2.24	4.65	118	70	309	295
Mandan	-29 <sup>1</sup>	65	61	90	40	0.88	0.84	5.80	4.65	119	80	326	350
Minot	-39 <sup>2</sup>	66	60	91	38	0.08	0.91	1.75	4.74	124	75	345	323
Mott	-32 <sup>2</sup>	63	60	87	36	0.30	0.67	4.90	4.90	111	80	294	351
Rugby	-41 <sup>1,2</sup>	68	60	94	37	0.32	0.86	2.09	4.97	133	84	349	370
Wahpeton	-35 <sup>1</sup>	72	65	97	48	0.05	0.78	3.68	5.70	149	104	378	440
Watford City	-36 <sup>2</sup>	65	60	93	40	0.42	0.75	2.41	3.80	116	80	319	354
Williston	-36 <sup>2</sup>	66	62	91	41	0.19	0.69	2.41	3.72	120	89	341	408
Wishek	-35 <sup>1</sup>	67	59	91	41	0.22	0.71	4.97	4.42	127	72	305	322

## DAYLENGTH (June 10, McClusky, center of ND)<sup>2</sup>

Sunrise: 5:45 AM      Daylength: 15h 52m  
 Sunset: 9:37 PM      Change since Jun 1: +11m

## LONG-TERM OUTLOOKS<sup>3</sup>

Jun 16–20: Temp.: Below Normal; Precip.: Normal  
 Jun 18–24: Temp.: Below Normal; Precip.: Above Normal

<sup>1,2</sup>Occurred on January 30 and February 8, 2019 respectively.

<sup>3,4,5</sup>Sources: North Dakota Agricultural Weather Network, [www.sunrisesunset.com](http://www.sunrisesunset.com), and National Weather Service, respectively.

<sup>6,7</sup>Rain data begin April 1. 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.

## Credits

Photos were made available under Creative Commons licenses specified by the photographers. **Page 1:** Joe Zeleznik, NDSU; Penny Nester, NDSU; Joe Zeleznik, NDSU. **Page 2:** Tom Kalb, NDSU (5); Anitha Chirumamilla, NDSU; Jon Nelson, [www.flickr.com/photos/jondavidnelson/47180696522/](http://www.flickr.com/photos/jondavidnelson/47180696522/). **Page 3:** eXtension.org, [www.flickr.com/photos/extensionhorticulture/2864426106/](http://www.flickr.com/photos/extensionhorticulture/2864426106/); Joe Boggs, Buckeye Yard and Garden onLine, [byg.losu.edu/node/292](http://byg.losu.edu/node/292); Chris Martino, [www.flickr.com/photos/chrismar/2942793011/](http://www.flickr.com/photos/chrismar/2942793011/); David Brookes, [www.flickr.com/photos/dmb272/492762811/](http://www.flickr.com/photos/dmb272/492762811/); Debbie Miller, USDA Forest Service, Bugwood.org; Tom Kalb, NDSU (2); Daniel Kulinski, [www.flickr.com/photos/didmyself/41034016674/](http://www.flickr.com/photos/didmyself/41034016674/). **Page 4:** WikimediaImages via Pixabay; Tom Kalb, NDSU; Penny Nester, NDSU; John, [www.flickr.com/photos/johngicz-/5816989855/](http://www.flickr.com/photos/johngicz-/5816989855/); James Chatfield, Ohio State Univ., Bugwood.org; R.W. Samson, Purdue University, Bugwood.org; Scott Knoke, NDSU; Chris O'Donoghue, [www.flickr.com/photos/cod\\_photos/](http://www.flickr.com/photos/cod_photos/)

[7276367662/](https://www.flickr.com/photos/pcoini/7276367662/); cotinus, [www.flickr.com/photos/pcoini/4633697089/](http://www.flickr.com/photos/pcoini/4633697089/); TruGreen RC, [www.flickr.com/photos/49695074@N07/4907692055/](http://www.flickr.com/photos/49695074@N07/4907692055/); Andre, [www.flickr.com/photos/andreivanbortel/3650970331/](http://www.flickr.com/photos/andreivanbortel/3650970331/).

Written by Tom Kalb, who expresses gratitude to the NDSU educators who contributed to this report: Craig Askim, Paige Brummund, Beth Burdolski, Anitha Chirumamilla, Katelyn Hain, Alicia Harstad, Lucas Holmes, Lezlee Johnson, Tessa Keller, Scott Knoke, Carrie Knutson, Chandra Langseth, Esther McGinnis, Penny Nester, Hannah Nordby, Max Robison, Yolanda Schmidt, Melissa Seykora, Emily Trzpcu, Joe Zeleznik and Brian Zimprich.

The information given herein is for educational purposes only. References to commercial products or trade names are made with the understanding that no discrimination is intended and no endorsement by North Dakota Extension is implied.

NDSU Extension, North Dakota State University of Agriculture and Applied Science, and the U.S. Department of Agriculture cooperating. Greg Lardy, Director, Fargo, North Dakota. Distributed in furtherance of the Acts of Congress of May 8 and June 30, 1914. We offer our programs and facilities to all persons regardless of race, color, national origin, sex, handicap, age, Vietnam era veterans status, or sexual orientation; and are an equal opportunity employer. This publication will be made available in alternative formats for people with disabilities upon request (701) 231-7881.

**NDSU**

EXTENSION