

YARD & GARDEN REPORT

August 19, 2021

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Drought Survival Tips for Lawns

Many lawns across our state are brown and crispy. Are they still alive?

That may seem like an odd question, but we are experiencing an historic drought.

In normal years, there is nothing unusual about letting your lawn go dormant in summer. The grass turns brown and then rests in the heat. Then in September, the temperatures cool off and our lawns green up again.

But this drought has been very long with especially hot temperatures. Many lawns have suffered from drought going back to last summer.

This extended, severe drought has caused many non-irrigated lawns to suffer. Weak lawns growing on compacted soil and with excessive thatch are most vulnerable.

Fortunately, the most common lawn grass grown in North Dakota is Kentucky bluegrass. This grass has remarkable resistance to drought due to its ability to go dormant. A healthy bluegrass lawn can go several weeks, if not months, without watering.

For now, let's focus on helping our lawns survive this historic drought:

Stay off a dormant lawn as much as possible. This includes mowing. We don't want to crush the fragile crowns (growing points located near the soil) and the leaves of the grass plants.

Do not apply herbicides now. Although weeds are more noticeable



in brown lawns, let's wait until mid-September.

Some herbicides harm drought-stressed lawns. Plus, you will have much greater success killing weeds if you wait until the weeds are actively growing in fall.

Pause on fertilizing. Drought-stressed, dormant turf does not need fertilizer now. Wait until September when temperatures cool off. Select a fertilizer that contains potash, such as 30-0-10 or something similar. Potash helps turf to cope with drought stress.

Proper watering is important. Start by knowing how much water your sprinkler provides. Set a series of flat-bottom cups at 5- or 10-foot intervals away from the sprinkler. Measure the time it takes for a half an inch of water to fall into the cups.

Green and growing lawns in summer want a big gulp of one inch of water per week.

Brown, dormant lawns in summer are much less thirsty. Only a few sips of water may be required during an extended drought.

One-half inch of water every 2 to 4 weeks from rainfall or your sprinkler may help in the long-term survival of the lawn. Our goal is to keep the crowns of the grass plants hydrated and alive, but not necessarily active.

These crowns will send out new grass blades and roots when cooler temps and normal rainfall arrive.

Rain is in the forecast this week. Let's hope these rains continue.

Later this fall we can assess any damage and repair the lawn if needed.

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Plant Health Care

Vegetables



Blooming Onions

Harvest and use promptly. The quality of the bulbs deteriorates rapidly. Flowering onions will not store well over winter.



Flea Beetles

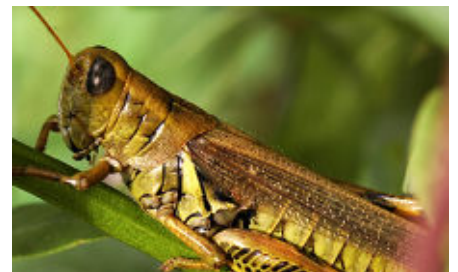
Swarms of small (1/8-inch) dark beetles eat shotholes in many vegetables such as kale, cabbage, broccoli, spinach and radish. Cleome is also damaged. Seedlings

are most sensitive. Spray spinosad, neem, soap, carbaryl or pyrethroid if plants suffer 10–30% defoliation or if there are 100 beetles per mature plant.



Blossom End Rot

Caused by calcium deficiency. Associated with uneven soil moisture and lush, leafy vines. Often prevalent on first fruits. Keep soil uniformly moist, avoid overfertilizing, and do not damage roots when cultivating. Mulch vines.



Grasshoppers

Spring rains will drown grasshopper eggs, but dry conditions this year led to swarms. Protect vegetables with carbaryl (Sevin) or pyrethroids, or shield crops with floating row covers. Mow nearby brush. Control strategies work best with young grasshoppers.



Cucumber Beetles

Striped and spotted beetles feed on cucumber and melon vines, spreading a bacterium that causes wilting. Kill with pyrethrin, neem, pyrethroid or carbaryl. Spray in evening to avoid killing bees.



Herbicide Injury on Potato

Tubers are cracked. The herbicide came from either spray drift, contaminated manure, or contaminated mulch. Plants are stunted and deformed. Tubers may be unsafe to eat.



Sowing Radish in Autumn

Now is the best time to sow radish. Radishes sown in spring get bitter as they mature under rising temps. Radishes grown in fall mature under cool temps, leading to milder, crisper roots.

Plant Health Care

Fruits



Fall Webworm

Caterpillars eat leaves but cause minimal damage to tree health. The leaves were going to drop soon anyway. Nests may be collected with a forked stick. Young larvae may be killed with insecticide. Pruning or torching branches may cause more harm to trees than the webworms.



Mottling on 'Honeycrisp'

Starches fail to move out of leaves. Affects trees with light fruit loads. Does not affect long-term productivity. Thin crops if needed in late spring for consistent yields from year to year.



Scorch on Apple

Fruits exposed to high temps and direct sun in the afternoon can be burned. Most often occurs on large fruits on water-stressed and dwarf trees. 'Honeycrisp' is sensitive. Irrigate trees.



Apple Fruit Drop

Hot temperatures, heavy crop loads, summer pruning, and pests may cause fruits to drop. Thin fruits in spring to 6 inches apart, irrigate regularly, mulch, and manage pests.



Raspberry Virus

Yellow mottling appears on leaves. Berries may be crumbly and taste bitter. Yields are poor. Remove plants (roots and all). Prevent problems in future by planting virus-free stock from nurseries.

Lawns



Sow Grass Seed

Now through mid September is the best time to overseed. The ground is warm and the seed germinates quickly. Rake soil and scatter seed. Rake to cover seed. Keep moist for 3 weeks.



Foxtail

This annual grass will die from frost. Mow foxtails growing in the lawn, or pull plants from the garden to prevent seed dispersal. Foxtails in lawns may be controlled using crabgrass preventers.



Skunks and Grubs

Skunks dig for grubs at night, creating small holes in infested lawns. Kill grubs with carbaryl or trichlorfon; skunks will hunt elsewhere. Outdoor lighting or ammonia-soaked rags will repel skunks.

Plant Health Care

Landscapes



Mulch Your Trees

If you love a tree, you will surround it with a ring of shredded bark or wood chips.

This mulch will conserve moisture, shield the trunk from bark-ripping mowers, provide nutrients, and moderate extreme soil temperatures.

Follow the 3:3:3 rule. Place mulch in a ring at least 3 feet in diameter (more is better). The depth of the mulch should be about 3 inches. Keep mulch 3 inches away from the trunk to prevent damage from trunk rot and nesting rodents. Avoid rock mulches.



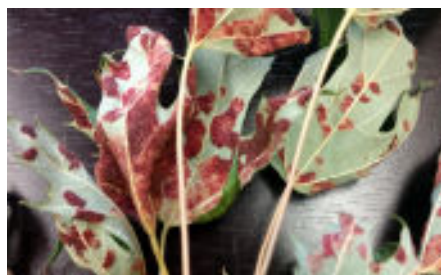
Herbicide Injury on Spruce

Needles become curled, distorted and may die back. Young needles are most sensitive. Most plants survive. Use herbicides only when needed; autumn is best. Spray when wind is calm; use heavy droplets.



Scorched Needle Tips

Newly planted trees are in shock and are especially sensitive. Irrigate deeply. A general rule is to irrigate 10 gallons of water per inch of trunk diameter per week. Only irrigate when soil is dry. Mulch with shredded bark.



Maple Velvet Erineum Gall

Tiny mites fed on these leaves in early spring. This caused a hormonal reaction, causing leaves to curl and develop velvety patches. Damage is not serious and no pesticides are needed.



Aster Yellows

Leaves turn yellow, small and narrow. Flowers are distorted. Transmitted by leafhoppers. Affects marigold, petunia, coneflower and many more flowers. Remove infected plants. Cultivate weeds to reduce leafhoppers. Spray to kill leafhoppers, if needed.

Credits

Sources:

Reicher, Z. Facts and advice on turf survival in drought. <https://turf.purdue.edu/facts-and-advice-on-turf-survival-in-drought/>. Purdue University. Accessed August 11, 2021.

Soldat, D. 2012. Keeping your grass alive during periods of extended drought. <https://hort.extension.wisc.edu/articles/keeping-your-grass-alive-during-periods-extended-drought/>. University of Wisconsin.

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Page 3. Dendroica cerulea; www.flickr.com/photos/dendroica/15169021341/; Esther McGinnis, NDSU; Tom Kalb, NDSU; Muhammad Ali, www.flickr.com/photos/m_ali/10635519685/; Tom Kalb, NDSU; Timo Newton-Syms, www.flickr.com/photos/timo_w2s/8986743787/; Tom Potterfield, www.flickr.com/photos/tgpotterfield/12681838205/; boviato, <https://www.flickr.com/photos/boviato/4952766137/>; Tom Kalb, NDSU. **Page 4.** Tom Kalb, NDSU (3); Scott Knoke, NDSU; Whitney Cranshaw, Colorado State University, Bugwood.org.

Written by Tom Kalb, who expresses gratitude to the Hort./Forestry Team for their contributions to this report.

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NDSU

EXTENSION

Weather Almanac for August 12–18, 2021

Site	TEMPERATURE ¹				RAINFALL ^{1,4}				GROWING DEGREE DAYS ^{1,5}			
	Aug 12–18				Aug 12–18		2021		Aug 12–18		2021	
	Avg	Norm	Max	Min	Total	Norm	Total	Norm	Total	Norm	Total	Norm
Bottineau	69	68	103	36	0.00	0.45	5.44	11.05	114	107	1709	1575
Bowman	74	69	103	45	0.00	0.23	5.82	9.64	125	118	1724	1611
Carrington	75	69	99	41	0.00	0.52	3.86	12.43	147	112	1860	1704
Crosby	69	67	99	43	0.10	0.34	7.29	9.71	105	101	1663	1452
Dickinson	74	69	102	45	0.00	0.35	7.02	10.80	133	112	1830	1596
Fargo	76	70	95	49	0.00	0.54	6.19	12.19	149	119	2122	1830
Grafton	74	67	96	43	0.00	0.70	6.18	11.90	143	103	1860	1585
Grand Forks	74	68	94	44	0.00	0.68	5.49	11.98	141	107	1916	1632
Hazen	73	71	104	41	0.00	0.39	5.95	10.93	123	122	1792	1759
Hillsboro	74	69	95	44	0.00	0.54	4.69	12.42	143	115	1922	1729
Jamestown	75	69	97	50	0.00	0.44	11.23	11.70	139	112	1830	1698
Langdon	69	65	91	42	0.00	0.58	10.15	12.35	123	91	1624	1356
Mandan	77	69	101	47	0.00	0.49	5.95	11.76	143	117	1948	1691
Minot	71	68	101	44	0.00	0.46	5.45	11.05	124	107	1792	1547
Mott	75	70	104	43	0.00	0.37	10.45	10.18	132	117	1779	1667
Rugby	72	67	101	38	0.00	0.47	4.27	12.32	126	104	1776	1574
Wahpeton	74	71	92	45	0.13	0.55	8.04	12.67	142	124	1992	1902
Watford City	73	69	100	48	0.00	0.33	6.47	9.52	125	111	1845	1622
Williston	72	72	100	48	0.00	0.38	5.90	9.20	123	126	1890	1818
Wishek	76	68	98	46	0.00	0.50	6.75	10.66	144	105	1878	1534

DAYLENGTH (August 19, McClusky, ND)²

Sunrise: 6:43 AM Daylength: 14h 5m
 Sunset: 8:48 PM Change since Aug 12: –21m

LONG-TERM OUTLOOKS³

Aug 24–28: Temp.: Below Normal; Precip.: Below Normal
 Aug 26–Sep 1: Temp.: Above Normal; Precip.: Below Normal

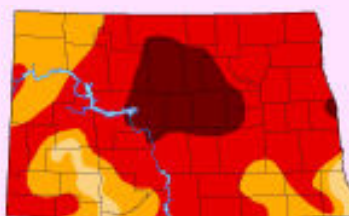
^{1,2,3} Sources: North Dakota Agricultural Weather Network, www.sunrisesunset.com, and National Weather Service, respectively.

^{4,5} 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.

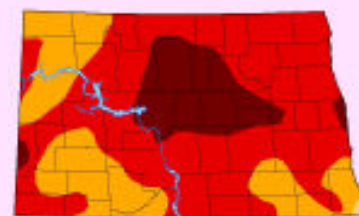
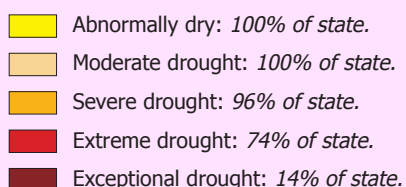
Drought Watch

Our historic drought continues. Last week was exceptionally warm and very dry across North Dakota. The entire state is currently in a “severe” or worse drought condition.

Rain and cooler temperatures are forecast over the next few days but long-term outlooks are not favorable. Sources: Drought Monitor, University of Nebraska; and National Weather Service.



August 10, 2021



August 17, 2021

