

A Worthy Foe

Have you ever tried to pull out a thistle? Ouch! Those spines are vicious.

You can pull a thistle and hoe it, again and again. The weed still keeps coming back. That's because the root system of thistle is amazing.

One Canada thistle plant can grow 300 feet of roots in one summer! Wow! These roots grow 6 feet or deeper and generate dozens of new shoots. One thistle plant can produce a network of thousands of plants connected underground.

This weed is a worthy foe for any gardener.

To win the battle, we must focus on its underground network. We must destroy its roots and exhaust them of their energy.

Cultivate or mow the weed as close to the ground as possible. The best time to do this is in summer after its flower buds begin to show (*left photo*). The roots use much of their energy to produce these flowers and have little food in reserve at that time.

This cultivation helps, but a more effective strategy will include the poisoning of the roots. **Autumn is the best time to attack. Now!**

The nights are getting longer and the thistle in your yard knows winter is coming. It is beginning to channel its sugars down into its roots to store them over winter. That's perfect for



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Pre-bloom, bloom and spring rosette stages of Canada thistle. The most effective time to cultivate is the pre-bloom stage. Autumn is the best time to spray it. The plant will accidentally send the herbicide down into its root system, causing maximum damage.

us. If we spray a thistle with a systemic herbicide now, the thistle will accidentally channel it along with its sugars down into its roots. Gotcha!

Products containing dicamba are recommended to control thistle on lawns in autumn. A spot spray of glyphosate works well and would be the best option if spraying under trees or in a garden. Organic products are not very effective on established thistles.

Herbicides can be sprayed in summer if needed when flower buds appear. These chemicals will burn the shoots but cause less damage to roots.

If you have thistle in your yard, now is the time to attack it. The battle may continue for a few years, but with perseverance you can prevail.

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Plant Health Care

Lawns



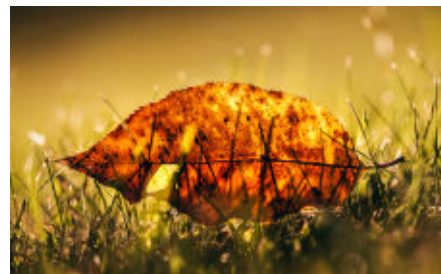
Toadflax

In lawns, use a herbicide containing dicamba now and/or when toadflax is blooming. In gardens, use a spot spray of glyphosate. Use picloram in non-crop areas and roadsides.



Slime Molds

Raindrops splash mold spores from thatch to grass blades. The spores smother, but do not penetrate the blades. Rake to aerate or use a strong stream of water to wash off mold.



Mowing Leaves

Shred leaves with your mower. The lawn will not suffocate from the mulched leaves as long as you can see the grass blades after mowing. Thick layers of leaves must be raked.



Weed-and-Feed Tips

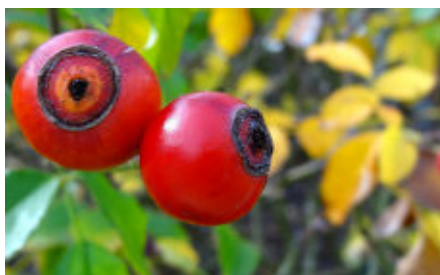
Apply soon while weeds are growing. Wet turf beforehand if using granules; herbicide must “stick” onto leaves. Start along the perimeter. To fill in the middle, apply at half the rate and then again in a perpendicular direction to prevent stripes.



Creeping Charlie

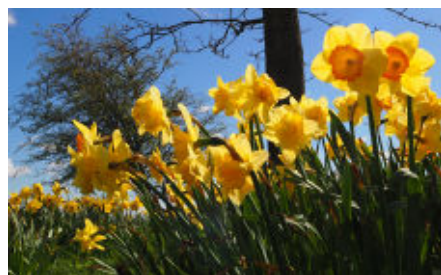
Also called ground ivy, this is a creeping mint with scalloped leaf edges, blue-violet blooms and square stems. Spray with triclopyr or a broadleaf-killing herbicide containing dicamba now and/or when its blooming in late spring.

Flowers



Rose Hips

Stop deadheading roses. The maturation of seed pods (rose hips) will help the rose bushes harden off in preparation for winter. The pods add color to the landscape during winter.



Naturalize With Bulbs

Scatter bulbs by tossing most in the bed. Fill in bare spaces with remaining bulbs. Plant. Sprinkle 1 cup of 10–10–10 time-release or a similar bulb fertilizer per 30 sq. ft. over bed. Rake and water deeply.

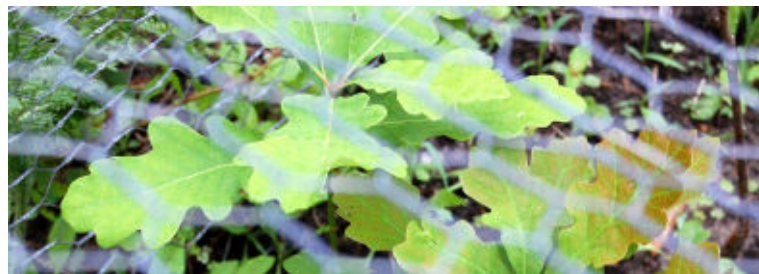


Overwinter Geraniums

Dig before frost; repot using potting soil. Cut back to one-third height to keep plants bushy. Set near a bright sunny window. Cool temps (60s) are best. Water sparingly over winter.

Plant Health Care

Trees and Shrubs



Grow Your Own Oak Tree

Place acorns in a pail of water for a few minutes. Discard floating acorns, which may be infested by weevils. Sow seeds thickly, 1–2 inches deep, into containers, the garden or a permanent spot. Acorns

of our native bur oak will germinate this fall, producing a taproot. The plant will emerge next spring and can be transplanted later in the year. Protect seedlings from predators with fencing.

Acorn-ucopia

Favorable weather has led to lots of acorns in the Upper Midwest. The squirrels are delighted! A large oak tree can produce 10,000 acorns in a year.

The production of acorns is cyclical, with bumper crops produced every 2–5 years. This is a process called *masting*. The abundance of acorns this fall will be more than wildlife (deer, birds, rodents and rabbits) can eat, ensuring that some acorns will be left alone and germinate into new oak trees.



Ash Flower Gall

Tiny mites fed on the tree's male flowers early in spring, creating this outgrowth. Galls cause minimal harm to the tree and no treatments are needed.



Tree Root Callus

Roots develop a callus when damaged from mowing. Avoid damage by mowing tall. Cover exposed roots with a thin layer of soil and sow seed. Better yet, apply mulch over roots under trees.

Vegetables



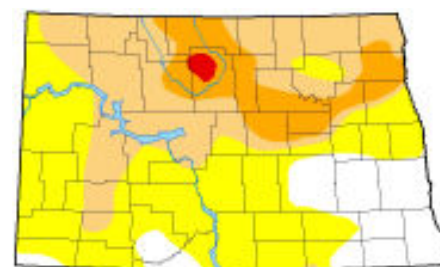
Tomato Fruitworm

Also known as corn earworm, these pests tunnel inside fruits. Remove infested fruits. Clean debris from garden this fall. Caterpillars may be controlled with *Bacillus thuringiensis*, neem, carbaryl or a pyrethroid such as zeta-cyfluthrin.



Protect Tender Vegetables

The water inside plant cells will expand and burst apart when frozen (just like a can of soda in the freezer). Cover tender veggies (tomato, pepper and vine crops) with blankets during light frosts. Expected frost dates are on page 4.



■ Dry ■ Moderate ■ Severe ■ Extreme

Dakota Drought

Updated September 11: Most (85%) of North Dakota remains *dry*. *Moderate drought* conditions increased to 43% of the state last week and extreme drought is present in McHenry County.

Weather Almanac for September 9–15, 2018

Site	AVG FROST ^{1,2}		TEMPERATURE ²				RAINFALL ^{2,4}				GROWING DEGREE DAYS ^{2,5}			
	Light	Killing	Sep 9–15				Sep 9–15		2018		Sep 9–15		2018	
	(32°F)	(28°F)	Avg	Norm	Max	Min	Total	Norm	Total	Norm	Total	Norm	Total	Norm
Bottineau	9/21	09/27	56	58	80	35	0.28	0.33	9.26	12.57	57	64	2091	1951
Bowman	9/18	09/30	62	59	85	45	0.00	0.29	10.51	10.61	75	70	2061	2023
Carrington	9/26	10/05	63	59	87	43	0.00	0.48	8.91	14.45	79	68	2268	2100
Crosby	9/22	09/29	55	56	83	39	0.12	0.28	7.74	10.95	50	62	2082	1812
Dickinson	9/22	10/03	61	58	83	46	0.00	0.35	11.75	12.14	65	71	2216	2001
Fargo	9/27	10/05	69	61	88	51	0.04	0.65	14.59	14.86	118	69	2608	2252
Grafton	9/24	10/04	63	58	87	44	0.65	0.59	12.00	14.57	79	66	2247	1961
Grand Forks	9/20	10/05	65	59	87	48	0.12	0.48	13.03	14.30	90	64	2346	2011
Hazen	9/14	09/27 ⁶	61	60	81	43	0.99	0.32	8.61	12.31	67	77	2191	2197
Hillsboro	9/28	10/06	66	60	88	49	0.11	0.50	12.35	14.63	96	66	2360	2127
Jamestown	9/25	10/04	63	59	81	46	0.69	0.59	17.82	13.98	78	65	2189	2086
Langdon	9/17	09/28	58	56	80	41	0.31	0.43	9.15	14.30	51	56	1982	1680
Mandan	9/23	10/01	63	60	81	47	0.13	0.36	14.01	13.33	77	68	2312	2094
Minot	9/28	10/07	58	58	79	40	0.20	0.34	8.59	12.62	57	60	2215	1915
Mott	9/18	09/28	62	59	85	42	0.03	0.30	8.25	11.44	79	75	2198	2090
Rugby	9/21	10/04	59	57	79	42	0.22	0.41	9.92	14.04	58	64	2148	1944
Wahpeton	9/27	10/04 ⁷	70	62	89	53	0.00	0.70	14.69	15.42	123	73	2519	2350
Watford City	9/14	09/25	60	58	82	46	0.00	0.23	8.77	10.58	64	69	2214	2014
Williston	9/22	09/29	60	61	85	46	0.00	0.26	9.84	10.46	60	77	2218	2271
Wishek	9/18	09/27	65	59	89	47	0.01	0.27	12.52	12.13	89	64	2186	1910

DAYLENGTH (Sep 17, McClusky, center of ND)³ LONG-TERM OUTLOOKS¹

Sunrise: 7:21 AM Daylength: 12h 30m Sep 22–26: Temp.: Below Normal; Precip.: Above Normal
 Sunset: 7:52 PM Change since Sep 10: –24m Sep 24–30: Temp.: Below Normal; Precip.: Above Normal

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

⁴Measurements begin April 1.

⁵GDDs 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.

^{6,7}Frost data for Beulah and Campbell, respectively.

Credits

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