

Sunflower Bouquets—Quick and Easy!

Do you want to make someone happy? Grow them a bouquet of sunflowers. The bright blooms are guaranteed to bring a smile.

Today's sunflower varieties bloom fast. You can grow a bouquet in only 50–60 days! It's remarkable!

Sunflowers are easy to grow. I like growing them with my kids. The plants shoot up from the ground like rockets, growing more than an inch a day! The flowers look beautiful in a vase, filling our home with warm, radiant colors.

Get to know the ProCut® sunflowers. These are the varieties grown by professionals. They bloom fast and are nearly foolproof.

The most popular variety is ProCut® Orange. It's a classic! The vibrant orange petals contrast beautifully with the earthy, dark brown centers.

New colors are released every year. You can grow ProCut® sunflowers in shades of burgundy red, bright yellow, light purple and fiery gold. The latest ProCut® varieties have creamy white petals—perfect for mixed bouquets.

Free Seeds!

Would you like to grow a bouquet of sunflowers this summer? We will give a free packet to any gardener living in North Dakota or in a nearby county of a neighboring state.



You can grow sunflowers for bouquets quickly and easily.

We especially encourage you to grow sunflowers with your children. Each child can have their own packet. They'll have a great time. Perhaps they can grow some flowers for their teacher, friend or grandparent.

We also have dwarf sunflowers that bloom early and can be grown in containers. They grow only 18–24 inches tall. Dwarf sunflowers are fun to grow in pots and make great gifts. It's a fun project for a child!

Go to the North Dakota Home Garden Variety Trials website at <https://www.ag.ndsu.edu/homegardenvarietytrials>. Look over the varieties and select the ones you want. Seeds are available on a first-

come, first-served basis. We would like all seeds sown by July 20, if possible. Supplies are limited.

Grow a bouquet of sunflowers this summer. Let's spread some happiness with our friends and children!

Inside This Issue

- ◆ Sunflower Bouquets 1
- ◆ How to Water Your Lawn 2
- ◆ Plant Health Care
 - ◆ Landscapes 3
 - ◆ Fruits and Vegetables 4
- ◆ Drought Watch 4
- ◆ Weather Almanac 5

The Right Way to Water Your Lawn

Can you enjoy a green lawn in summer without an expensive water bill?

This is a hot topic across much of North Dakota today. Let's discuss how you can make every drop of water count.

To keep your lawn green and growing, it needs about 1 inch of water per week from you, rainfall or a combination of both.

To measure how much is 1 inch of water, set a group of flat-bottomed cups at 5- to 10-foot intervals from the base of your sprinkler to the edge of its reach. Measure the time an inch of water takes to fall in the cups. Use this as your base time.

Water deeply. Giving your lawn a big gulp of water is better than giving it a series of sips. Roots grow where the water is. If you water *deeply*, you will develop a *deep* root system. On the other hand, if you only sprinkle the surface of the soil, you will create a shallow root system.

If you have a clay soil, irrigate only once or twice a week. Sandy soils can't hold a full inch of water, so we will need to split the application to two or three times a week.

Split applications are also a good idea if you see water running off from the lawn (for example, on a sloped landscape). We want the water to be absorbed and not to run off.

Water in the early morning. The grass plants will be active and will absorb the water they need. Any extra water will evaporate, keeping the grass blades dry and preventing diseases. Watering during the middle of the day is not recommended since much of the water you apply will evaporate before the plants absorb it. Watering in the evening is not recommended since



Set a group of cups away from your sprinkler to measure the time it takes for 1 inch of water to fall.

the lawn will stay wet all night, leading to diseases.

Mow properly. This makes a big difference. Mow *tall* and let the grass clippings *fall*. Tall turf naturally develops a deeper root system. The tall grass blades and the grass clippings will shade the soil, keeping it cooler and conserving moisture. The first lawns that turn yellow in a neighborhood are lawns that are cut short and where clippings are collected.

Monitor your automatic timer. These "set it and forget it" systems are convenient, but they sometimes irrigate the lawn when it's not needed. Only irrigate when the lawn is dry. Don't irrigate when it's raining or when rain is expected. Rain sensors and soil moisture sensors are available that prevent irrigation systems from running when rain is falling or when the soil is moist.

Improve your soil. Adding organic matter can help. The next time you aerate the lawn, fill in the holes with some compost or peat moss. In clay soils, this organic matter will open the soil, helping water infiltrate rather than run off. In sandy soils, this organic matter will help the soil hold onto the water before it drains away.

Use the natural alternative. You have the option of not watering your lawn at all. Your lawn will turn yellow gradually and go dormant. Going dormant under intense heat is natural for lawns. Lawns will turn green again in the fall when temperatures cool.

Whether you irrigate your lawn or not, you can have a healthy lawn without breaking your bank account. Irrigate only when needed and make every drop count.

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.



Bumps on Hackberry

Tiny psyllids laid eggs on the leaves in early spring. The baby nymphs hatched and fed on leaf sap, creating the bumps. The psyllids may develop inside the bumps. The leaves are functional and damage is negligible. No treatment is needed.



Dutch Elm Disease

The initial sign is a major branch turning yellow and wilting. Take a one-inch-diameter sample and look for brown streaking beneath the bark and in sapwood. Prompt removal of an infected tree is the most effective option, especially if multiple branches are affected. Burn, bury or chip wood.



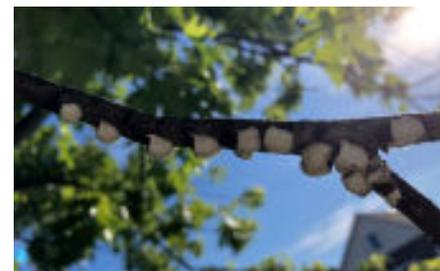
Cottonwood "Snowstorm"

Female cottonwoods are releasing seeds. The cottony fluff on the seeds helps the seeds fly great distances. Growth regulator treatments can prevent this, but this is not practical or economical in most cases. Plant male, seedless cultivars like 'Siouxland' and 'Robusta'.



Iron Chlorosis on Maple

Leaves turn yellow, but veins remain green. Iron is locked in soil and not available to roots. Associated with high pH. Young trees may be fed with a foliar spray or a root feeder. Use fertilizer that contains iron. See NDSU publication *Iron Chlorosis in Trees*.



Cottony Maple Scale

Adult scales suck sap, weakening trees. The young are now emerging from the cottony egg sacs, crawling to form their own homes. Ladybugs and other natural enemies usually control this pest. Insecticidal soap, carbaryl, pyrethrin or summer oils kill crawlers.



Fertilizing in Summer

The Fourth of July is one of the "holiday dates" for fertilizing lawns (Memorial and Labor Days, too). Organic fertilizers are especially useful in summer because they are less likely to burn. Only fertilize if the grass is green and regularly irrigated.

Plant Health Care

Fruits and Vegetables



Deadly Compost

Compost made from grass clippings treated with herbicides may be deadly to garden plants. The effects of dicamba, a popular weedkiller, may last for several months. The effects of clopyralid, a popular herbicide used to control weeds in pastures (and illegally in lawns) may last for several years. Compost produced by municipalities may be toxic. Test your compost by preparing a 50-50 mix of compost and potting soil. Sow beans in pots containing this mix. If the bean seedlings are okay, your garden plants will likely be okay.



Raspberry Virus

Yellow mottling appears on leaves. Berries may be crumbly. Remove plants (roots and all) if 10% or fewer are affected. If more, growers typically keep the planting until yields are poor. Control virus-spreading aphids.



Apple Maggot

The #1 pest of apples in ND emerges now. Monitor for egg-laying flies using traps or bright red apples pierced with wire. Coat with Tanglefoot, 2 to 5 traps per tree. Spray trees if flies appear.



Cutworm

Spray carbaryl, cyfluthrin, permethrin or other pyrethroid, or *Bacillus thuringiensis* at night at the base of plants. Cultivate the garden and remove plant debris. Cutworms cause most problems in spring; rarely in summer.



Rhubarb Harvest

Stop harvesting rhubarb. This will allow the plant time 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.



Curculio

Weevils attack young apple fruits after petals fall. They scratch the fruit skins, laying eggs underneath. Fruits may drop or develop deformed. Place a white blanket under the tree; shake branches to find weevils. Spray if they are found.

Drought Watch

Much of central North Dakota received significant amounts of rain last week, slowing down the progress of the drought. Currently, 53% of the state is under moderate drought (no change since last week). Simply put, the west is in drought and the east is not. Source: Drought Monitor and Adnan Akyuz, State Climatologist.



June 30, 2020

- Moderately dry: 71% of state.
- Moderate drought: 53% of state.
- Severe drought: 1% of state.

Weather Almanac for June 28–July 4, 2020

Site	TEMPERATURE ¹				RAINFALL ^{1,4}				GROWING DEGREE DAYS ^{1,5}			
	June 28–July 4				June 28–July 4		2020		June 28–July 4		2020	
	Avg	Norm	Max	Min	Total	Norm	Total	Norm	Total	Norm	Total	Norm
Bottineau	73	67	91	59	2.76	0.83	5.25	7.59	134	101	807	745
Bowman	70	67	95	45	0.97	0.59	3.90	7.10	110	103	745	695
Carrington	76	68	91	62	1.30	0.87	3.36	8.20	148	111	856	805
Crosby	68	65	86	53	1.69	0.74	4.79	6.36	108	92	746	670
Dickinson	71	66	93	50	1.38	0.74	3.33	7.66	121	99	812	717
Fargo	79	70	90	67	0.46	0.84	6.07	8.53	169	120	986	874
Grafton	77	67	90	65	3.49	0.84	10.95	7.91	157	103	869	767
Grand Forks	78	68	90	64	3.73	0.84	7.42	7.65	160	106	890	784
Hazen	73	68	91	53	4.30	0.70	5.65	7.79	128	110	848	829
Hillsboro	78	69	91	66	0.56	0.84	6.80	8.18	163	113	918	817
Jamestown	75	69	93	59	0.21	0.86	2.95	7.78	144	112	834	789
Langdon	75	65	88	63	2.47	0.88	5.61	8.09	146	89	768	631
Mandan	73	68	94	53	1.99	0.78	3.28	7.56	132	111	880	766
Minot	72	67	87	57	2.22	0.72	5.24	7.71	128	102	800	709
Mott	71	68	95	49	4.08	0.70	5.12	7.46	116	108	810	749
Rugby	74	66	88	58	1.45	0.84	3.47	8.08	139	100	812	756
Wahpeton	78	70	90	65	0.70	0.86	6.48	8.68	161	123	948	924
Watford City	71	67	90	53	2.01	0.72	3.89	6.47	120	101	808	732
Williston	71	69	90	54	1.61	0.65	2.50	6.16	123	116	831	846
Wishek	73	67	91	57	1.16	0.72	3.94	7.11	136	103	795	697

DAYLENGTH (July 4, McClusky, ND)²

Sunrise: 5:51 AM Daylength: 15h 51m
 Sunset: 9:42 PM Change since June 28: -5m

LONG-TERM OUTLOOKS³

July 11–15: Temp.: Above Normal; Precip.: Above Normal
 July 13–19: Temp.: Above Normal; Precip.: 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.

Credits

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Written by Tom Kalb, who expresses gratitude to the Horticulture/Forestry Team for their contributions to this report. Thanks to Ellen Crawford for editing the lawn irrigation article.

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