North Dakota State University

NDSU EXTENSION SERVICE

YARD & GARDEN REPORT

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Bitter Cold, Snowy Winter Likely

If you don't like the weather now, just wait a few minutes.

Mark Twain

Unfortunately for us, the reverse of this saying holds true too: If you LIKE the weather now, just wait a few minutes.

Everyone likes the weather we are having now. It's *November* and we can take a pleasant walk outside. My kids are wearing shorts and playing soccer. *This is going to change.*

The world's leading climate organization, the National Oceanic and Atmospheric Administration (NOAA) predicts a harsher than normal winter for us in North Dakota.

The NOAA has reissued a La Niña watch, predicting the phenomenon has a 70% chance of developing this season and a 55% chance of persisting through winter.

La Niña is the *cooling* of waters in tropical regions of the Pacific Ocean (El Niño is the *warming* of waters). This cooling influences rainfall patterns in the region, which in turn, affects weather patterns everywhere. Its effects are strongest during winter when the jet stream is strongest over the USA.

For us in the Northern Great Plains, this leads to colder and stormier than normal conditions.

How does this affect us as gardeners? Be prepared for winter extremes. Don't forget to mulch your tender roses, perennials and strawberries. Marginally hardy trees may suffer some dieback of branch tips.

Figs. 1–2. Much of North Dakota has a 40% chance of a cooler than normal, and a 33% chance of a wetter than normal winter.

This is a gentle reminder that we live in a harsh place. We live in Hardiness Zones 3 and 4 (our average extreme winter temps range from –20 to –40°F) (*Fig. 3*). Next spring when you are tempted to buy a peach or magnolia tree, think again. Mother Nature is a powerful force.

There is a silver lining to this stormy forecast. Freezing cold temps have their benefits. Many insect pests that spend their winter here in tree cavities and soil will freeze to death. Our best defense against invasive pests such as emerald ash borer and Japanese beetle is our brutal winter. I always hope for a couple weeks of frigid cold temps to destroy these pests!

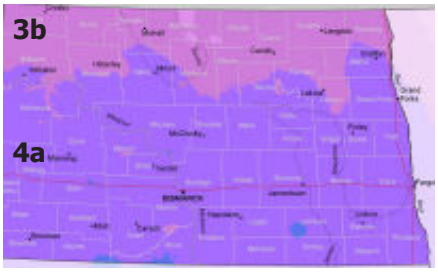


Fig. 3. Average extreme winter temps:
Zone 3a: –40 to –35°F (light purple);
Zone 3b: –35 to –30°F (purple);
Zone 4a: –30 to –25°F (dark purple);
Zone 4b: –25 to –20°F (light blue).

INSIDE THIS ISSUE

Deer Repellents

Deer hunting season is upon us and the hunted critters are full of energy. This is a critical time to protect your plants from rutting bucks and other deer looking for a snack.

Deer bucks are scraping trees to remove the velvet from their antlers. They do this to mark their territory and to attract females. This scraping destroys a tree's bark and vascular rings (*Fig. 5*). This damage will severely stunt or kill a tree.

Deer are more likely to feed on trees now as berries, grass and other food sources decline.

The most reliable option to prevent damage from a deer is to **kill it**. The second best option is a **physical barrier**. An 8-foot tall fence is recommended, preferably electrified. Both of these options are impractical in most cases.

That leads us to **repellents**. Sometimes repellents work and sometimes they don't. Sometimes we *think they work* and they don't; that's why university trials are more useful than anecdotal stories.

For example, let's say a deer munches on your apple tree. Your friend tells you that if you hang bars of soap on the tree, the deer will go away. Sure enough, after you hang a few bars of soap on your tree, you never see damage again.

You think the soap solved the problem. What you don't know is the deer that munched on your tree got ran over by a truck later that night. The soap never made a difference.

Scientific studies have been conducted to develop reliable strategies to repel deer. The most effective repellents are sprayed directly on the plants to be protected. Sprays applied on the ground along the perimeter of the site are less effective.

Figs. 4–6. Deer are very active now. They can destroy plants by mutilating bark and feeding on lower limbs.

Deer repellents have a limited time of effectiveness. In most cases, repellents need to be applied on a regular basis and when new plant growth appears. Follow the instructions on the label.

Repellents that induce fear in deer and generate a sulfurous odor are effective. This includes products containing decaying animal proteins such as eggs or slaughterhouse waste. Deer readily sense this odor and may fear a predator is nearby. Such products include Deer Away, Liquid Fence and Plantskydd.

Repellents that cause pain, such as hot pepper sprays, are effective at maximum levels of concentration.

Repellents that contain bittering agents (denatorium benzoate) are less effective. Ropel is one such product. These products have to be tasted to work, which means the plants must be at least slightly damaged to prevent greater damage.

Repellents such as bars of soap or bags of hair are less effective.

Some trees are more subject to damage than others. Deer love to eat apple, arborvitae (*Fig. 6*) and linden trees. They generally dislike prickly plants such as hawthorn, Russian olive, barberry, pines and spruces. Deer do not like ash and lilac, the most popular tree and shrub in our state, respectively.

Growing Fragrant Hyacinth

Do you love fragrant flowers? Grow a hyacinth! A hyacinth will fill a room with sweet smelling perfume.

Hyacinths require a cooling period before they bloom. We can "force" a hyacinth to bloom by setting the bulb in a cool spot for 10–12 weeks. This mimics winter. You may be able to find bulbs which are pre-cooled, further reducing the cooling requirement by 2–4 weeks.

Look for hyacinth bulbs labeled for forcing. These are larger bulbs of cultivars that force easily.

You can plant them in potting soil. Hyacinths are most often grown in groups of 3 bulbs set in a 6-inch pot. Place them so the tip of each bulb is at the surface.

I encourage you to try growing hyacinths in water. Forcing vases are available at florist shops, garden centers and online. A deluxe vase is shown (*Fig. 7*). The classic vase looks like an hourglass with its top cut off. Place the bulb in the top chamber and fill the bottom chamber with water so it stands about 1/4-inch from the base of the bulb. The bulb will rot if it sits in water.

Fig. 7. Growing hyacinths in vases has been a passion among gardeners since Victorian times. With refrigerators today, it's easy!

During the cooling period, you can watch the bulb sprout its pure white roots. It's absolutely fascinating!

Set the bulb in a dark, cool (approximately 40°F) place. A refrigerator or unheated garage works well. If set in a refrigerator, keep apples away because the fruits emit gas that inhibits flowering.

If planting in soil, you may need to water the bulbs once or twice during winter. If planting in water, check the water now and then; replace the water if it gets low or cloudy.

The plant will develop a strong root system and then sprout after 10 weeks. Once the plant has sprouted a couple inches, take it out of the dark and gradually introduce it to more light (bright but indirect) and warmer conditions (approximately 60°F).

Blooms will appear in 3–4 weeks. The fragrance is amazing!

WINTERIZE YOUR MOWER

Scrape off dried grass or dirt from the underside of the mower (shown).

Siphon out as much gas as possible and then run the engine until it runs dry. If the gasoline can't be easily removed from the tank, add a fuel stabilizer and run the engine for a few minutes to circulate the fluid.

While the engine is warm, drain and refill with fresh oil (shown). Remove the spark plug and battery.

Clean or replace the air filter. Sharpen or replace the mower blade.

Store the mower in a cool, dry place. If you cover your mower, use a cloth material. Plastic covers can trap moisture.

Last-Minute Chores in ND Yards and Gardens

Mulch tender flowers

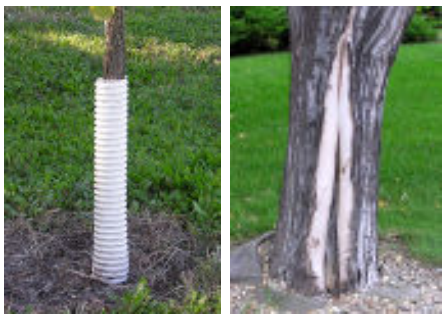
Apply 4–6 inches of straw *after* the ground freezes this month. This mulching will insulate plants from extreme temps, prevent premature sprouting, and keep the soil stable during freezing/thawing cycles.

Clean under fruit trees

Rake and remove fallen leaves and fruits in the orchard. This debris can be a source of diseases and insect pests next year. Look out for wasps when picking up fallen fruits.

Clean garden debris

Remove or deeply bury any diseased plants or fruits in the garden. This will reduce the likelihood of infection next year.



Wrap young trees

Place white guards (*left photo*) or wrap Kraft paper around trunks. This prevents cracking (*right photo*) caused by the scalding rays of the winter sun. Linden, maple, mountainash and fruit trees are very sensitive.

Irrigate evergreens

Irrigate evergreens now to fill needles with water. These needles are exposed to the winds and glaring solar rays of winter. The branch tips of young, wind-exposed trees are most sensitive.

Plant tulips and daffodils

Bulbs are on sale. It sounds crazy, but you can plant until the ground is frozen solid. The flower bud is already inside the bulb. Irrigate and mulch.

Mow the lawn

A tall turf is bad over winter. It attracts voles (*shown*) and becomes more susceptible to mold. Cut your turf at a normal height or slightly lower (1.5–2.0 inches).

Shred or rake 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.

Store your vegetable seeds

Most vegetable seed will germinate for at least three years. Store the seed in a cool place. Sweet corn, onion, okra, parsley and parsnip seed are short-lived, so use fresh seed of these vegetables every year.

Weather Almanac for October 12–November 5, 2016

	HARD FROST[1,2] (28°F)		TEMPERATURE[2] Oct 12–Nov 5				RAINFALL[2] Oct12–Nov5		RAINFALL[2] 2016		GROWING DEGREE DAYS[2,5] Oct12–Nov5		GROWING DEGREE DAYS[2,5] 2016	
Site	2016	Norm	Avg	Norm	Max	Min	Total	Norm	Total	Norm	Total	Norm	Total	Norm
Bottineau	09/14	10/01	42	38	65	17	0.63	0.97	17.59	16.59	54	20	2171	2153
Bowman	10/06	10/01	48	40	74	23	0.68	0.95	13.60	14.70	171	40	2593	2270
Carrington	10/07	10/03	45	40	76	22	0.42	1.33	16.24	19.09	96	33	2368	2340
Crosby	09/13	10/01	45	37	70	22	0.71	0.80	16.37	14.23	94	17	2251	1998
Dickinson	10/13	09/25	48	40	74	23	0.01	0.91	13.50	15.89	149	49	2571	2267
Fargo	10/09	10/07	48	42	73	29	1.59	1.46	19.07	20.97	108	34	2793	2489
Grafton	10/12	10/12	43	39	68	27	0.60	1.44	27.93	20.02	50	25	2394	2177
Grand Forks	10/24	10/02	46	39	71	25	0.22	1.40	23.97	19.48	90	22	2531	2219
Hazen	10/12	N/A[6]	47	42	75	19	0.06	1.01	16.61	16.06	141	61	2517	2508
Hillsboro	10/09	10/09	45	41	71	21	0.62	1.44	20.02	20.28	93	25	2557	2340
Jamestown	10/08	10/03	45	40	72	22	1.23	1.12	24.20	18.59	105	24	2401	2298
Langdon	10/08	09/29	41	36	70	23	0.48	1.03	24.91	18.36	41	6	2047	1830
Mandan	10/06	10/03	48	41	76	21	0.05	0.98	17.52	17.02	149	38	2576	2336
Minot	10/07	10/05	45	39	69	25	0.32	1.03	16.54	17.05	91	18	2335	2099
Mott	10/06	N/A	47	41	75	18	0.14	0.82	14.30	15.59	163	54	2468	2371
Rugby	10/08	N/A	44	38	70	22	0.29	0.85	17.15	18.30	77	24	2346	2155
Wahpeton	10/09	N/A	47	43	72	24	0.94	1.45	20.56	21.26	106	39	2715	2608
Watford City	10/13	09/28	47	39	72	25	0.17	0.79	13.87	13.77	118	36	2525	2260
Williston	10/11	10/04	47	42	69	24	0.58	0.70	13.65	13.50	109	56	2502	2571
Wishek	10/07	10/03	48	40	76	24	0.45	1.02	21.83	19.76	119	28	2345	2122

DAYLENGTH (Nov. 5, McClusky, center of ND)[3]

Sunrise: 8:32AM | *Daylength:* 9h 48m

Sunset: 6:19PM | *Change since Oct 12:* –1h 16m

LONG-TERM OUTLOOKS[4]

Nov. 11–15: Temp.: Above Normal; *Precip.:* Below Normal

Nov. 13–19: Temp.: Above Normal; *Precip.:* Below Normal

[1,2,3,4] Sources: National Oceanic and Atmospheric Administration, North Dakota Agricultural Weather Network, www.sunrisesunset.com, and National Weather Service, respectively.

[5] 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.

[6] N/A = not available.

Credits

Sources:

ICWDM (Internet Center for Wildlife Damage Management). 2008. Understand the strengths and weaknesses of repellents before you buy the hype. http://icwdm.org. University of Nebraska: Lincoln.

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Written by Tom Kalb, Extension Horticulturist, North Dakota State University.