YARD & GARDEN REPORT

August 18, 2017 Vol. 5, No. 6

Gold Rush

Have you ever seen a larch tree in autumn? Its green needles turn to gold—an awesome sight (top left photo). Unfortunately the needles drop after one month, leaving you with six months of bleak, barren branches to stare at. Yikes!

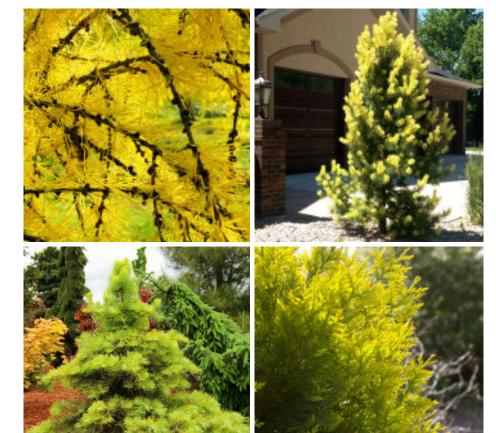
What if there were evergreens that sparkled in gold while holding onto their needles?

This dream has come true. Nurseries have discovered an amazing array of golden conifers. Some of these plants sparkle in spring, some in winter, and some all year round! These colorful conifers are one of the hottest trends in landscaping today.

Start with 'Taylor's Sunburst' lodgepole pine, a true showstopper! I've seen its dazzling presence at the Minot Zoo and it grows well in Bismarck landscapes (top right photo). Its new needles emerge in a burst of bright gold, then lighten during summer, and finally turn into a rich green in fall. The tree can be used as a showy specimen in any landscape.

If you are looking for gold in winter, consider 'Wintergold' concolor fir. Its needles appear as chartreuse in spring (bottom left photo), changing to dark green in summer, and then yellow in fall. This fir does best in partial sun. Spectacular!

The needles of 'Sunkist' arborvitae emerge as lemon yellow in spring (hottom right photo), turning warm orange in fall. 'Rheingold', 'Golden



The glow of larch (top left) is brilliant but brief. 'Taylor's Sunburst' pine (top right), 'Wintergold' fir (bottom left) and 'Sunkist' arborvitae (bottom right) are dazzling and hold onto their needles all year.

Globe' and 'Holmstrup' are other promising arborvitaes. Select a sheltered spot to prevent injury from winter winds.

Be on the lookout for these golden conifers at your local garden center or search online. "Gold Fever" is spreading among nurseries and new varieties are being discovered all the time.

Inside This Issue

morac imo issac							
 Golden Conifers 							
◆ Lawn Aeration Q & A	2						
◆ Drought Watch	2						
Chores & Challenges							
 Vegetables 	3						
 Fruits, Trees, Lawns 	4						
◆ Weather Almanac	5						

Should You Aerate Your Lawn?

Is lawn aeration necessary?

Almost all lawns will *benefit* from an aeration, and a great lawn *demands* it. That said, most lawns *do not need* it.

Lawns suffering from heavy foot traffic, excessive thatch (>1 inch thick) or grown on heavy soils will benefit most.

What are the benefits?

Aeration will:

- Invigorate roots and stimulate new growth.
- Reduce soil compaction.
- Reduce thatch accumulation.
- Enhance movement of water and nutrients into the soil.
- Smooth out bumpy lawns.

When is the best time?

Late August to mid-September, after the lawn has broken out of its summer dormancy. These lawns are primed for optimal growth. Spring is another good time.



Which machine is best?

Hollow tine or core aerators are best. These have hollow metal tubes that remove plugs out of the soil. These aerators are available at rental agencies. Lawn care services will offer aeration. Avoid solid-tine or spiking devices that may compact the soil.

Any special tips?

Remove cores as deeply as possible, about three inches. The soil should be moist but not wet. Tines cannot dig deeply in dry soils and tines will get plugged in wet soils. A few passes are usually needed.

After aeration, what's my next step to a great lawn?

Let the cores dry for a couple days and mow them to break them up. Aerated lawns respond well to fertilization or overseeding; this can be done immediately after aerating.

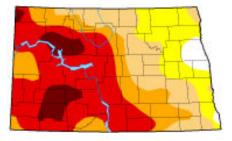
How often should I aerate?

Aerate your turf once every 1–5 years for optimal growth. Turf on heavy soils or suffering from heavy foot traffic will benefit from more frequent aeration.

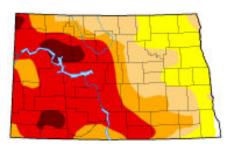
Drought Watch

Cooler temps and above normal precipitation in August may have halted the deteriorating conditions across most of North Dakota. Nevertheless, most landscapes remain under severe drought status.

Recent rains are helping our lawns to break out of dormancy and start new growth. These rains have loosened watering restrictions in several communities but are leading to foliar diseases on vine crops. Details of our weather for August and the growing season are presented on page 5.



August 1, 2017



August 15, 2017

- Moderately dry (crop growth slowed); 100% of state.
- Moderate drought (crop damage, voluntary water use restrictions); 82% of state.
- Severe drought (crop losses likely, water use restrictions); 63% of state.
 - Extreme drought (major crop losses, widespread water use restrictions); 44% of state.
- Exceptional drought (widespread crop losses, water emergencies); 5% of state.

Chores & Challenges

Vegetables





Rotted Tomatoes, Peppers

Initial fruit clusters are susceptible to this calcium deficiency. Keep soil evenly moist; mulching helps. Do not damage roots when cultivating. Associated with high nitrogen and lush vines.



Tomato Spotted Wilt Virus

Unusual rings appear on fruits. Plants were infected as transplants by thrips. Pull out infected plants. Control weeds. In the future, select healthy transplants from weed-free greenhouses.



Septoria Leaf Blight

Small (1/8-inch), numerous spots begin on lower leaves. Remove infected foliage. Avoid getting foliage wet. Fungicide sprays (chlorothalonil, mancozeb, copper) prevent spread.



Scab on Potato

Bacteria create scars on tubers. Peel off scars. In future, prevent scab by keeping soil evenly moist for 4–6 weeks after flowers appear. Avoid fresh manure. Use resistant varieties, for example 'Redgold', 'Superior' and 'Goldrush'.



Rhizoctonia Rot on Potato

Spuds have muddy bumps (scurf) that won't rub off. Peel off scurf. Remove vines. Don't plant potato in this area next year. Avoid planting in cool, wet soil. Plant shallowly. Seed may be treated with sulfur. Harvest promptly.



When to Harvest Onions?

Harvest when tops have fallen over and shriveled. Keep in garden for a couple days to dry. Shake off loose dirt and cure bulbs in a warm (80°F), airy spot until necks wither (2–4 weeks). Store in a cool, dry place.



Fruitless Flowers

Male flowers of cucumbers, pumpkins and squash do not have fruits attached. This is normal and no treatment is needed.



Flea Beetle

Tiny (1/8-inch) pests create shotholes in potato, radish and leafy greens. Young seedlings are very sensitive. Consider spraying carbaryl, neem or pyrethrin if 10–30% defoliation.



Blight on Cucurbit Vines

Numerous diseases appear on vines now. Maintain high yields by spraying with chlorothalonil (Daconil, Bravo), mancozeb or copper. Avoid getting foliage wet. Use resistant cultivars.

Chores & Challenges

Fruits



Edible Chokecherries?

Chokecherries on trees infected with black knot (shown) are edible. Chokecherries on red-leaf varieties such as 'Canada Red' and 'Schubert' are edible.



Harvest Rhubarb?

Stop the main harvest around July 4. The plant needs its stalks in summer for growth. A few stalks in summer may be removed on mature plants until the fall frost. These stalks are less tender.



Honeycrisp Mottling

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 year to year.

Trees



Scorched Needle Tips

Newly planted trees are especially sensitive. Irrigate deeply. Rock mulches generate heat and should be avoided; shredded bark mulch is superior.



Leaf Drop on Poplar

Poplars and aspens subject to leaf blight are shedding leaves now. Rake leaves to get fungi out of the area. Pruning helps to reduce humidity and diseases in canopy; do this in March.



Japanese Beetle

Infested nursery plants were sent across ND this spring. The beetles are active now. Note the white hair tufts on sides of pest. Contact NDSU Extension or ND Dept of Ag if you find a beetle.

Lawns



Sow Grass Seed

4

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



Summer Patch

Soil fungi create dead areas, often with green centers. Associated with drought, thatch and compacted soil. Promote healthy roots by aerating and fertilizing in September. Raise mower height.



Grubs

Grubs eat roots, creating dead spots. Peel back damaged turf to reveal pests. If more than 3 grubs per square foot, treat with carbaryl or trichlorfon. Irrigate deeply to get chemical in soil.

Weather Almanac for August 1-15, 2017

	TEMPERATURE				RAINFALL				GROWING DEGREE DAYS ^{1,2}			
	August 1–15				August 1–15		2017		August 1–15		2017	
Site	Avg	Norm	Max	Min	Total	Norm	Total	Norm	Total	Norm	Total	Norm
Bottineau	62	69	84	43	2.92	1.01	7.40	12.77	185	261	1420	1522
Bowman	63	70	86	42	0.38	0.61	4.03	11.43	184	289	1637	1553
Carrington	63	70	82	46	3.03	1.11	10.16	13.99	188	275	1567	1649
Crosby	64	68	84	44	0.72	0.77	3.57	11.01	196	249	1578	1402
Dickinson	63	70	85	45	1.61	0.81	4.92	12.22	181	281	1709	1541
Fargo	67	71	86	49	2.04	1.09	7.23	14.56	234	290	1749	1771
Grafton	64	68	82	46	0.58	1.39	7.40	13.72	201	251	1523	1534
Grand Forks	66	69	85	48	0.37	1.37	9.87	13.72	214	262	1680	1579
Hazen	63	72	84	44	5.21	0.87	8.46	12.24	186	293	1663	1699
Hillsboro	65	70	84	45	0.45	1.19	6.64	14.42	206	282	1604	1672
Jamestown	64	70	81	50	3.82	0.93	9.55	13.30	187	278	1536	1643
Langdon	62	66	77	48	1.56	1.29	7.52	13.60	168	224	1280	1311
Mandan	64	71	84	49	4.22	1.18	9.40	12.97	193	288	1705	1634
Minot	64	69	82	48	2.41	0.98	5.57	12.99	186	262	1584	1494
Mott	63	71	86	44	2.15	0.76	5.80	12.10	184	287	1649	1610
Rugby	63	68	81	47	2.13	1.14	8.28	14.11	188	256	1539	1523
Wahpeton	65	72	82	45	4.30	1.03	13.97	14.41	208	303	1652	1841
Watford City	65	70	85	45	1.62	0.74	5.89	10.91	201	280	1691	1568
Williston	66	73	85	48	1.89	0.79	5.51	10.40	210	305	1747	1755
Wishek	63	68	80	47	2.88	1.19	7.06	14.87	178	259	1571	1483

DAYLENGTH (Aug. 15, McClusky, center of ND)³

Sunrise: 6:38 AM Daylength: 14h 17m August 23–27: Temp.: Normal; Precip.: Normal Sunset: 8:55 PM Change since August 1: –40m August 25–31: Temp.: Normal; Precip.: Normal

LONG-TERM OUTLOOKS4

Credits

Sources

Stier, J.C. 2000. Lawn aeration and topdressing. University of Wisconsin.

University of Nebraska. 2017. Drought Monitor, droughtmonitor.unl.edu/.Home.aspx

Photos were made available under Creative Commons licenses specified by the photographers. Page 1: Andrei Zverev, www.flickr.com/photos/azibiss/22011967059/; Greg Morgenson, NDSU; Sam Pratt Copyright of Conifer Kingdom 2017; Bailey Nurseries, Inc.. Page 2: Brunner Lawn Care; Drought Monitor, droughtmonitor.unl.edu/Home.aspx. Page 3: VEGETABLES: Mark, www.flickr.com/photos/eggrole/6011378943/; Paul Bachi, University of Kentucky Research and Education Center, Bugwood.org; William M. Brown Jr., Bugwood.org; William M. Brown Jr., Bugwood.org; Missouri Botanical Garden; Angela Johnson, NDSU; Chiot's Run, www.flickr.com/photos/chiotsrun/

7556496698/; Tom Kalb, NDSU; Gerald Holmes, California Polytechnic State University at San Luis Obispo, Bugwood.org; James K. Lindsey of Ecology of Commanster via Wikimedia Commons; Tom Kalb, NDSU (2). Page 4: FRUITS: Raymond McNeil, www.flickr.com/photos/31727756@N05/4312867268/; Hella Delicious, www.flickr.com/photos/0x/2804539537/; Esther McGinnis, NDSU. TREES: Tom Kalb, NDSU (2); David Cappaert, Bugwood.org. LAWNS: Timo Newton-Syms, www.flickr.com/photos/timo_w2s/8986743787/; Lee Miller, Univ. of Missouri, Bugwood.org; JB, www.flickr.com/photos/harvardavenue/3517642232/.

Written by Tom Kalb, who expresses gratitude to the NDSU educators who contributed to this report: Craig Askim, Anitha Chirumamilla, Kelsey Deckert, Kelsie Egeland, Ken Eraas, Sheldon Gerhardt, Bill Hodous, Angie Johnson, Scott Knoke, Julie Kramlich, Esther McGinnis, Penny Nester, Steve Sagaser, Megan Vig, Todd Weinmann, Kathy Wiederholt and Joe Zeleznik. Special thanks to Greg Morgenson for his contributions to the Gold Rush article.

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 the North Dakota Extension Service is implied.

NDSU Extension Service, North Dakota State University of Agriculture and Applied Science, and the U.S. Department of Agriculture cooperating. Chris Boerboom, 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.



¹GDDs 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.

^{2,3,4}Sources: North Dakota Agricultural Weather Network, www.sunrisesunset.com, and National Weather Service, respectively.