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 (bottom right photo), turning warm orange in fall. ‘Rheingold’, ‘Golden Globe’ and ‘Holmstrup’ are other promising arborvitae. 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.
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
Moderately dry (crop growth slowed); 100% of state.

August 15, 2017
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.

**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.

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**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.

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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
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

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

- **Sunrise:** 6:38 AM
- **Daylength:** 14h 17m
- **Sunset:** 8:55 PM

### LONG-TERM OUTLOOKS

- **August 23–27:** Temp.: Normal; Precip.: Normal
- **August 25–31:** Temp.: Normal; Precip.: Normal

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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.

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

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**Credits**

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- Written by Tom Kalb, who expresses gratitude to the NDSU educators who contributed to this report: Craig Askim, Anitha Chirumamilla, Kelsey Decker, Kelsie Egeland, Ken Eras, 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.

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