Chalet
LANDSCAPE · NURSERY · GARDEN CENTER

Fall Lawn Care 2022
Bill Leuenberger and Jennifer Brennan

Shop the Collection Here

Outline:

- Reading the label
- What the labels tell you
- Choosing the right fertilizer
- Weed control
- Seeding and over-seeding the lawn
- Aeration

Reading the label is the first step to:
Choosing the right product for your needs
Keeping you, children, and pets safe
Saving money
Helping the environment

Labels tell you:
How to use a product safely and effectively.
How to store the product safely.
First aid instructions.
Phone numbers to call for help or more information.

Selective Lawn Weed Killers

Choosing The Right Fertilizer:
Fertilizer choices at the end of the season are determined by the need of the turf at the time of application. There are two applications remaining:

1. Early fall application will help in the process of photosynthesis via nitrogen promoting blade growth and absorption of light for plant food.

2. Winterizer fertilizer nitrogen addition will stay within the turf and give the turf an added boost come spring without creating flush growth. This application also includes potash for building cell walls and helps to secure carbohydrates within the plant to sustain life through winters onslaught.

Organic based Lawn Fertilizer
Bonide Winterizer Phase 4 12-0-15 N-P-K

Winterizer fertilizer
Milorganite will make the lawn more drought resistant the following summer.

Nature Safe uses a 8-3-5 ratio for strong cell wall formation and better cold hardiness

Weed (difficult types) preventative – *Scotts Step One For Seeding*

- I. – Mesotrione 21-22-4 N-P-K
- Prevents creeping bent grass
- Prevents nimblewill
- Prevents seed germination of most weeds
- Does not prevent grass seed germination
- Excellent nutrient levels

Fertilizer

Major nutrients

Nitrogen = N
Phosphorous = P
Potassium = K

Micro nutrients are also important
Soil pH regulates the amount
of available nutrients in the soil solution
Calcium: Magnesium ratio

Fertilizer –synthetic or organic

Synthetic forms:

Use slow release N
Usually higher N
Apply every 8 weeks

Organic forms:

Nutrients available due to soil microbial activity
Slow-release, so less chance of burning
Best to apply monthly

Fall Fertilization- Winterizer

Winterizer fertilizers **help the grass build a larger root mass in the fall resulting in a healthier lawn**. A stronger root system helps to provide a lawn with better tolerance to heat and drought stress. A healthy turf is also better able to withstand insect and disease problems.

A final winterizing application of fertilizer is very important. Applying a winterizer fertilizer this (Mid October to Mid-November) time of year will help rebuild turf by providing the nutrients needed to build up the root system and leave you with a healthier, thicker lawn in the spring.

A few years ago, dormant turf fertilizers contained higher rates of phosphorus which were believed to help with root development. This has all changed since researchers found that grass plants utilize nitrogen for root growth in the fall once grass blades stop growing.

Another benefit of fertilizing the lawn this time of year is that it greens the turf without causing a flush of growth. Nutrients stored in the plant in the fall are then available for plant development in the spring. Paul Rieke, professor emeritus of the Department of Crop and Soil Sciences at Michigan State University, related

that "one of the advantages of a dormant application of nitrogen is that the turf is green in the spring but does not result in the rapid flush of growth that occurs with an early spring (April) application."

Weed Control

- Early fall is the best time for controlling broadleaf weeds.
- Weeds sprayed at this time of the year are taking carbohydrates into the root system which in turn takes the weed controls into the system.
- The weed plant is trying to build for the following season but instead is taking herbicides down to the meristem and is killing it.
- Ground ivy should receive a herbicide after the first heavy frost or freeze. Ground ivy stores carbohydrates after a freeze thus herbicides work better at this point.

Weeds

- Annual
- Perennial
- Lawns
- Planting beds
- Prevention
- Removal
- Grassy weeds
- Broadleaf weeds

Crab grass
Bio-Advanced EXTREME Crabgrass Killer A.I. Fenoxaprop-p ethyl

Common weeds

- Chickweed
- Dandelion
- Purslane
- Spurge

Difficult common weeds

- Creeping Charlie / Ground Ivy
- Speedwell
- Nutsedge
- Wild Violets

Grassy Weeds
Mestrione for bent grass control

- Weed Eradication – end summer/early fall 16-0-3
- Weed (difficult types) preventative

A. I. – Mesotrione
20-22-5 N-P-K
Prevents creeping bent grass
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Prevents seed germination of most weeds
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Excellent nutrient levels
Weed (difficult types) preventative

Ficaria nevus (formerly*Ranunculus ficaria*) – terrible weed to know and eradicate
Lesser Celandine (*Ficaria verna* (previously *Ranunculus ficaria*))

- This non-native highly-invasive weed belongs to the buttercup family, Ranunculaceae, and is sometimes called "fig buttercup." The "fig" refers to the shape of the underground tubers and "buttercup" describes the flowers.
- Lesser celandine is known as a "spring ephemeral" owing to the time of year when the short-lived plants and flowers are present. The majority of this weed's hide-and-seek life-cycle is spent hidden from view as underground tubers.
- Lesser celandine is native to Europe, northern Africa, western Asia, and Siberia. It is believed to have been first introduced to North America as an ornamental in the mid-1800s and escapes were reported in Pennsylvania in 1867.
- The shiny dark green heart-shaped leaves are borne on fleshy, white, tightly clustered leaf stalks. New leaves are noticeably mottled with light and dark green patches.
- Although lesser celandine plants seldom rise more than 4 – 5" above the soil, they have dense root systems and plants grow together to form mat-like impenetrable canopies.

Bulbils

- A close examination of leaf axils near the base of mature plants later this spring will reveal the second secret weapon:
- The football-shaped protuberances called bulbils.
- Bulbils can give rise to new plants and are perfectly suited for being picked-up in the dewclaws of deer.
- Deer have been implicated as a major mover of lesser celandine with new plants often sprouting on or along deer trails.

Extreme Ephemeral

- Lesser celandine's final secret weapon is its extreme ephemeral nature.
- Plants collapse and disappear from view in late-spring to early-summer depending on environmental conditions.
- It's amazing how rapidly a broad expanse of lesser celandine can completely vanish.
- The weed is not gone; it is waiting in the form of recharged tubers that will support ever-expanding colonies next season.
- Control weeds by hand pulling or
  nonselective herbicides

Selective Lawn Weed Killers

Selective Weed Killers

Iron HEDTA based (Earth-friendly)

Seeding And Over seeding The Lawn

- Seeding the turf area will have the best germination rate when applied between September 1 and October 1.
- You will still get germination after October 1 depending on the soil temperatures and the air temperatures.
- For the most part germination would be reduced up to 80% however it is still worth the effort
- Photosynthesis and Fall Seeding
- Safe to seed until the beginning of October to have enough time for the seeds to germinate , get established and survive Winter
- Grasses used in lawns prefer full sun, the more sun the happier they are
- Only shade tolerant grasses, not shade loving grasses
- As trees grow larger and more are planted, seasonal sunlight shifts and causes the shade to lengthen and deepen – the only solution is to cut down or thin trees

Fall Lawn Overseeding

- Fall is the best time to overseed a lawn or repair thin or bare areas.
- Cool nights and mild, shorter days provide the ideal conditions for seed germination.
- Grass seed is better able to retain moisture during the fall, and seedlings will thrive without the extreme heat that occurs in the summer months.

Why Overseed in the Fall?

- It's fine to overseed in spring, although many people wait too long and end up seeding in the summer when it's much more difficult to get new grass to grow.
- However, if you're in the habit of applying a crabgrass prevention herbicide, you can forget about spring seeding. Most pre-emergent herbicides inhibit all seed germination for up to 12 weeks—and that puts you right in the middle of summer.
- Instead, it's best to overseed right after aerating the lawn, which is ideally done in the fall.

Reasons to Overseed

- A lawn that's never overseeded tends to grow old
- If it is consistently mowed, it doesn't even have the opportunity to go to seed to propagate itself
- The lawn has to rely on rhizomes, stolons, and tillering for growth
- Eventually, an old lawn will have trouble maintaining vigorous growth, competing with weeds, and dealing with other lawn stresses
- Also, new varieties of grass species are entering the market every year
- It's beneficial to integrate grass that may be resistant to drought, disease, or insect damage into a lawn with older varieties that lack these features

How to Overseed Your Lawn

- For cool-season turf, start the overseeding process by thoroughly aerating the lawn.
- Apply the new seed with a fertilizer spreader, following the product's recommended coverage rate.
- It's ideal when the seeds fall into the aeration holes because they won't dry out as quickly and will germinate faster.

- You can even go over the lawn with the back of a rake to usher more seeds into the holes.
- Follow the seeding with an application of your favorite fall fertilizer, applying it the same day as the seed, then water the lawn.
- Water once or twice every day until the new grass has begun to grow. The seed may need two weeks or more to germinate.
- Continue to mow the lawn as usual until it stops growing for the season.

Correct Type of Seed

Be sure to use the appropriate kind of grass seed for your climate, be it a cool season or warm season.

- Select the right type of seed for your lawn's use, whether it's high-use and intensely maintained or aesthetic and low-maintenance.
- Drought-resistant grasses are now available in both cool and warm season species.
- Grass seed comes in a range of quality, and you get what you pay for.
- Often the cheap seed is made up of generic, poor-performing varieties of grass or, worse, loaded with filler like weed seeds or annual ryegrass.
- You don't have to buy the most expensive variety, but look for something that's good quality and highly recommended by local experts.

Seed –success points

- 1 pound / 300-500 sq ft
- Germination in 7 – 21 days
- Important to keep moist throughout establishment period
- Cover lightly with top soil
- Best to use mixes with several cultivars
- Hot Dog Bun example of Correct Grass Seed Coverage
- Use a drop or rotary spreader, or a hand whirly-bird spreader

Aeration

This is by far the best mechanical thing you can do for your turf outside of mowing.
This is also the best time of year to aerate.
Now until November 1 and possibly beyond if soils remain unfrozen.

Thatch

Aeration

- Why?
- This time of year the turf has the best chance to recover from where a plug was taken out.
- The removal of a plug does several things that benefit the lawn.
- 1. It stimulates the area the plug was removed and allows for room for the turf rhizomes to expand.
- 2. It allows air and nutrients to expand and go deeper into the soil. Water of which plus air behind it gets deeper into the soil which allows the turf root systems to expand deeper.
- 3. The plug pulled and released on the surface of the turf allows soil from one area of the turf to break down in another area of the turf, even if it is only inches away, this process is considered to be a form of over-the-top soil addition. Ever so small yet very important!

Aeration – why not?

- We however do not recommend mechanical aerations in shaded lawns due to the fact that shade turf has very shallow root systems and can easily be pulled out of the ground which is anti-productive.
- The shade turf (generally Fine Fescue) cannot and does not send root systems deep into the soil. Instead we recommend in shaded compacted soils a product called *Liquid Aerify*.

- This product helps to break down soils when applied without tearing at the soil.
- Generally shaded lawns have open soil spaces where seed and soil can make that intimate soil contact thus no need to aerate.

Summer Patch Disease - Magnaporthe Poae

- Summer patch can be an aggravating problem in summer. Hence the name. A chronic root rot closely associated with all bluegrass or Poa turfgrass species. This continues to one of our biggest problems on golf courses in the Chicago District. Diseases of roots are very difficult to diagnose with accuracy unless a trained plant pathologist is in the picture (aka there are many look-alikes).
- Close up of summer patch disease. A chronic root rot of all bluegrass species. Settle, Jul 25, 2022
- Examining Kentucky bluegrass roots - One healthy root with root-hairs is surrounded by dark roots that are no longer functional
- Root rot is caused by Magnaporthe poae or summer patch
- Settle, Aug 18, 2022
- Preventative fungicide in Spring

Dollar Spot Disease

Chinch Bug

- Chinch Bug test
- Chinch Bug damage
- Chinch Bug damage

Grub Control - preventative

- Control is from chemicals applied to the soil, absorbed by the plant and remain throughout season
- Early application is best – too late now because it takes 14 days to absorb into plant tissues
- GrubEx label backside – see listed insects

Grubs in lawn

- Japanese Beetle and grub
- Grub Control after infestation
- Dylox
- Works within 24 hours
- Lasts only 3-5 days
- Quick kill effect
- Use to prevent severe damage to lawn

Damage indirectly from grubs – wildlife searching for grubs

- My own neighborhood skunk
- Secondary wildlife "pressure"
- Bonide Repels-All granular or liquid spray

Supplemental water

- Guideline:
- Plants need 1" of rain or the equivalent in supplemental watering every week (when temperatures are 75 degrees F – for every 10 degrees above 75, add an additional ½" of water.)
- To prevent transpiration stress at higher temperatures, water 2-3 times during the week, dividing the 2" between applications

Calibrate irrigation system - fancy term for measuring the amount of water delivered by YOUR sprinkler with YOUR water pressure, goal is ½ inch 3 times per week

Watering- Turf

Established vs. new

½" of water / month to keep crowns alive but dormant when established

Daily inspection for 3-4 weeks if newly planted

Seed – keep soil moist through germination plus 4 weeks (3 mows) – note exception to rule

Sod – light syringing 2x / day for 3-4 weeks until roots have knitted into soil (test by gently trying to pull sod up)

Final mow

- Usually in November
- Cut the blade length to 2 " to prevent damage during frozen conditions in winter

Putting the lawn to bed properly helps it wake up healthy in Spring!

Thank you for attending the
Chalet Webinar