



Professional Turf Management **GUIDE**

The Nutrite Approach to responsible and effective turf management

RIGHT
PRODUCT

RIGHT
RATE

RIGHT
TIME

RIGHT
PLACE



**deep
roots**

THE NUTRITE BMP APPROACH...

A proven method for responsible and effective turf management.

To maintain turf in the most environmentally responsible and cost effective manor, it is necessary to consider many factors including how, where, when and what type of fertilizer products to apply. Nutrite is here to help with these very important decisions with our 4-step approach to turf management:

1. RIGHT PRODUCT

Match fertilizer product type to plant needs and the area being fertilized.

Choosing the Right Product and Nutrite technology will deliver even, consistent growth. Utilizing the available soil testing program will provide one more level of guidance in choosing the **Right Product**.

2. RIGHT RATE

Apply the proper rate of fertilizer for your specific plant needs and field conditions.

Nutrite's detailed technical sheets and personalized agronomic support allow us to recommend the **Right Rate** and application method for each of our products.

3. RIGHT TIME

Apply fertilizer when nutrients are necessary to optimize plant health.

Your Nutrite turf specialist will recommend an annual fertility program using our exclusive technologies such as UMAXX®, Methydure®, FMS™ and Nutryon-S® slow release nitrogen sources that will feed at the **Right Time**, in tune with the needs of the turf.

4. RIGHT PLACE

Apply Nutrite fertilizer products in an environmentally responsible manner where it is available to the plant.

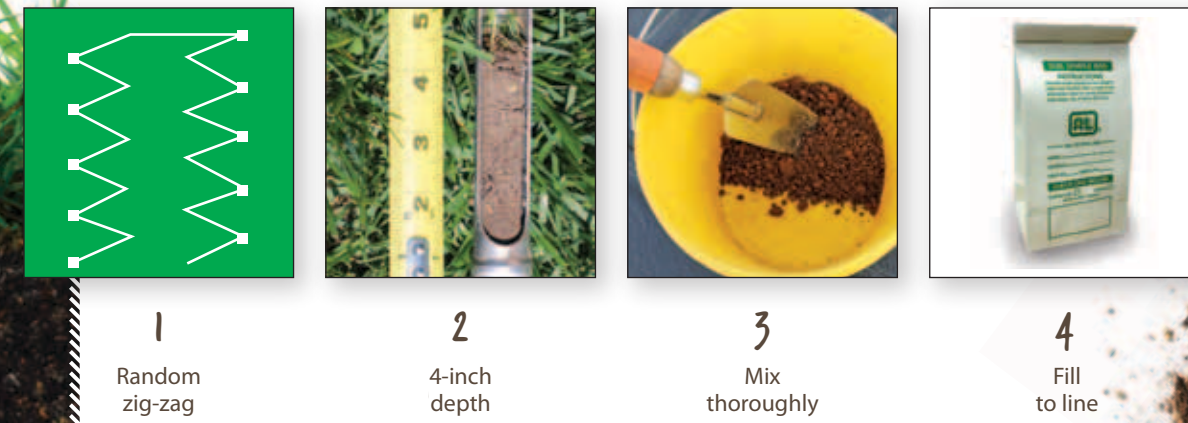
Nutrite designs products to maximize absorption by the plant while minimizing losses due to leaching or volatilization which allow for more precise applications of nutrients when applied in the **Right Place**.



SOIL ANALYSIS: WHAT IS YOUR TURF ASKING FOR?

Take the guesswork out of determining the right fertilizer and amendment products to apply to the turf you manage. Soil analysis, performed by a world recognized and provincially accredited laboratory, provides the information necessary for program creation, corrective measures and application timing. Included with analysis are recommendations and agronomic support specific to your site to ensure the correct products are applied to achieve the best results with the least impact to the environment and your fertilizer budget.

COLLECTING A SOIL SAMPLE - 4 STEPS



- 1 Random zig-zag
- 2 4-inch depth
- 3 Mix thoroughly
- 4 Fill to line

CARING FOR TURF IS MORE THAN FERTILIZING

For more information on turf management practices, please visit www.nutrite.com



Mowing: Following sensible mowing practices can make the difference between a good lawn and a superb lawn.



Irrigation/watering: Water only when your turf needs it—infrequently and deeply.



Thatch: Often misunderstood, thatch is a layer of both living and semi decomposed organic material—occurring in most lawns, only in excess is it detrimental to turf.



CAN YOU RECOGNIZE THE SYMPTOMS OF NITROGEN DEFICIENCY?

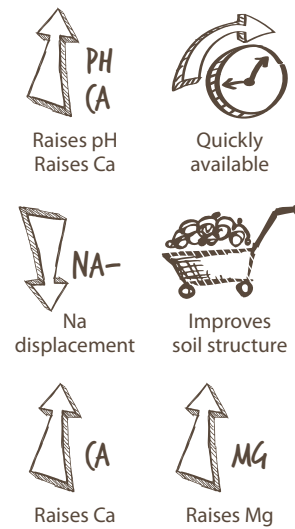
Older leaves appear chlorotic (yellow) and die. Growth rate is reduced as a general thinning of the stand. Nitrogen deficiency can also lead to a greater development of certain diseases (e.g. dollar spot or red thread).

Nitrogen deficiency is often found in sandy soils as well as soils exposed to high leaching conditions from heavy rainfall or excessive irrigation. Loss by denitrification occurs on poorly drained or compacted soils. While there is no accurate test for nitrogen deficiency, a simple indicator would be to apply nitrogen and see if the symptoms subside.



AMENDMENT PRODUCTS

- 1) Use SOLU-CAL to supply available calcium and increase soil pH. Solu-Cal enhanced granulated calcium carbonate is efficient and fast acting. Finely ground to insure optimum availability.
- 2) Use SOLU-CAL S to reduce the build of salts and bicarbonates in the soil. Calcium sulphate enhanced with **Carboxy**® is the key to maintaining soil structure and porosity in turf along laneways, roads and sidewalks.
- 3) Use DOLOMITIC LIMESTONE to supply magnesium in deficient soils and increase pH where necessary.





MAINTAINING HEALTHY TURF



RECOVERY PROGRAM FOR THIN OR WINTER DAMAGED TURF

Canadian winters can wreak havoc on turf from ice damage, disease and desiccation. Following a tough winter turf should be thoroughly raked or dethatched to allow room for new growth and sunlight to warm the soil. A solid base of fertility combined with an overseeding program will help a damaged turf recover more quickly.

1. EARLY SPRING - 20-5-15 FMS

Providing five nitrogen sources that release at varying rates in combination with phosphorous and potassium, this product will provide the primary nutrients essential to recovering turf.



2. MID SPRING - 2-4-2 OVERSEEDING MIXTURE

A five-variety blend of three types of grasses applied with a Sustane natural fertilizer that is high in phosphorous, 2-4-2 has the flexibility for use as an overseeding mixture as well as a bare-spot repair product. Contains 10% compost for the moisture retention necessary for newly germinated plants.



3. EARLY SUMMER - 20-5-15 FMS

The 75% slow release nitrogen fertilizer is designed to provide up-front green colour followed by months of steady, green growth without surges. Proven and trusted by professionals for decades.



4. EARLY FALL - 24-0-10 UMAXX

UMAXX® and Nutryon S® work together in 24-0-10 to help turf recover from summer stresses and restock carbohydrate reserves while producing outstanding colour. Apply 4lb/1,000 ft² during early-to-mid September for best results.



BETTER TO PREVENT: 3 VISIT PROGRAM FOR GREEN, HEALTHY TURF

Replace fertility and amendment visits with other, value-added services by utilizing the program below. An application of **32-2-10, 90% slow release nitrogen fertilizer** establishes a base of fertility that will last from spring through until fall with consistent growth and colour.

1. EARLY SPRING - SOLU-CAL S

Reduce salt damage
Increase nutrient uptake



2. MID SPRING - 32-2-10 SEASON LONG

Feed until Fall with one application using our exclusive Nutryon Season-Long technology we now have results that last up to six months with fewer applications.



3. EARLY FALL - 24-0-10



BUILD RESERVES IN THE FALL

RIGHT TIME BMP TIP

Temperature has a profound effect on turf response to fertilizer applications. Applications should be timed to correspond with periods of optimum turf growth and minimal stress.

For example, at soil temperatures below 10 °C, organic nitrogen sources and some synthetic forms do not release significant amounts of nitrogen. At temperatures above 24°C, nitrogen loss from volatilization and turf damage can occur. Use the right source for that particular time in the growing season.



GREEN AND HEALTHY TURF ALL SEASON LONG NOW POSSIBLE WITH FEWER APPLICATIONS!

NUTRYON

Season-Long

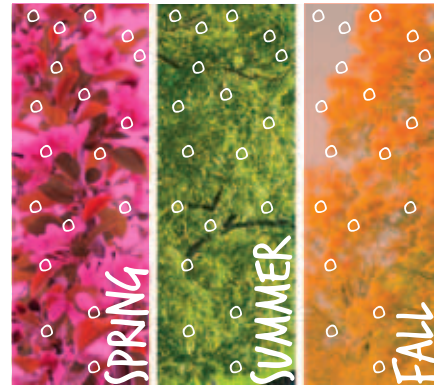
Designed to reduce the number of fertilizer applications and ideal for industrial, commercial or municipal turf, Nutryon Season Long provides up to six months of steady feeding from 90% slow release nitrogen. Four longevities of polymer-coated nitrogen in specific proportion ensure a constant supply of nitrogen to the turf while minimizing nitrogen losses to the environment.



CULTURAL PRACTICES

OVERSEEDING

1. Research shows light, frequent overseeding is more effective.



2. Moisture maintenance is key for successful germination.



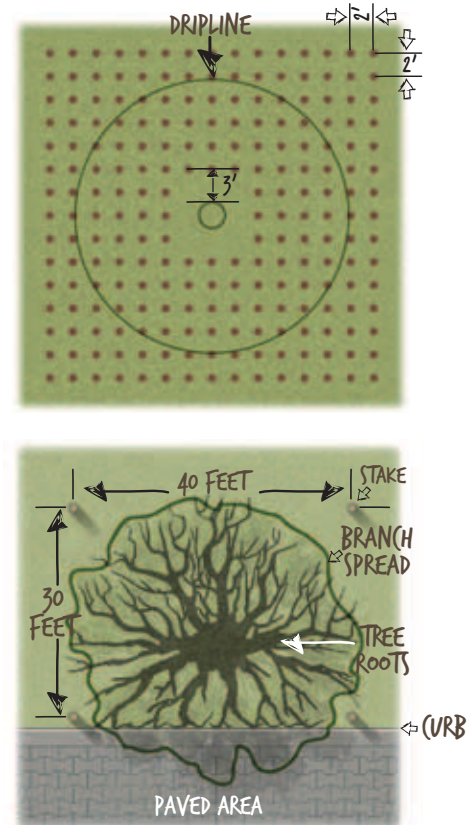
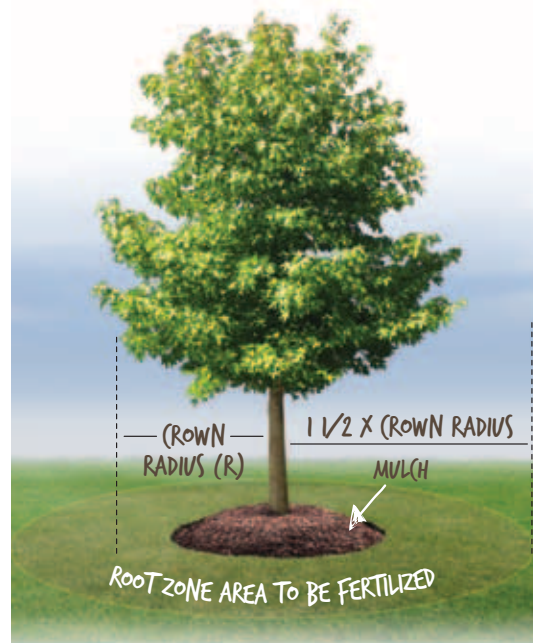
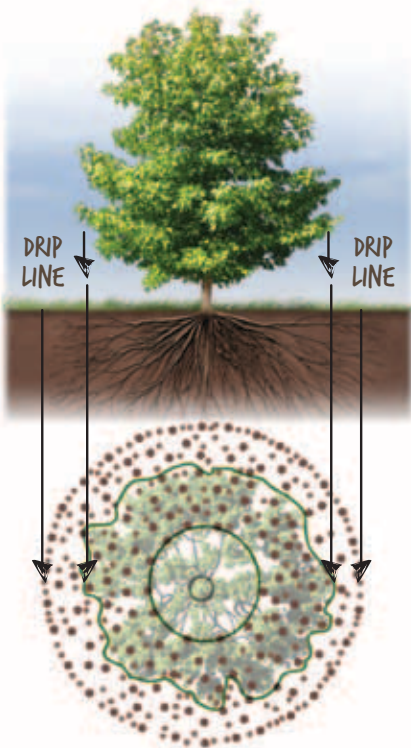
3. New seedlings require Phosphorus.



Composed of 5 seed types, our 2-4-2 Overseeding Mix with Sustane provides means to overseed easily several times per season and includes mulch and fertilizer.

HOW TO FERTILIZE TREES AND SHRUBS

Healthy trees and shrubs are an integral part of the landscape. Trees and shrubs can receive 2 to 3 pounds of actual nitrogen per 100 sq ft of root area per year—the root area usually comprises about 1 1/2 times the area of the foliage or canopy. Properly timed applications of a slow release nutrient balanced granular fertilizer like **14-7-14** on a shrub bed will help to ensure lasting vigour and appearance. Fertilize in early spring when soil temperatures and moisture support plant growth. Trees on the other hand, are best fertilized by injection particularly when the root area is covered by nutrient competitive turf. **Water soluble 28-4-16 with 70% UMAXX** is designed for this application. Once again, treat an area 1.5 times the area of the canopy. The amount of required nutrient is then equally divided among the injection sites.



SYSTEMIC TREE IMPLANT

ACECAP 97



Labeled for Emerald Ash Borer



Now biodegradable

ACECAP® with Orthene® Systemic Insecticide for Trees

ACECAP 97® Systemic Insecticide Tree Implants control a broad range of destructive pests of ornamental trees. They provide season-long control with 12 to 18 weeks residual in deciduous trees and up to a year in evergreens. ACECAPS 97® contain 98.9% Orthene®. They are an ideal treatment for trees that are difficult to spray because of their location (near people, pets, waterways, etc.) or are too large to reach easily.

MEDICAP MD

MEDICAP MD® Tree Implant 12-4-4 with micros

Designed to stimulate tree growth and produce dark green foliage, the Medicap MD® Tree Implants are ideal for treating trees that have had root damage from drought, construction or transplanting, and for trees whose root systems are covered by concrete or asphalt. Easy to install. Part of the encapsulated nutrients are quickly released into the tree's vascular system at a much faster rate than soil applied fertilizer. The rest of the nutrients remain in the tree for 2 seasons.

EASY TO INSTALL

REQUIRED TOOLS:

- Electric or rechargeable drill and a sharp, spiral 3/8" drill bit.
- Hammer
- Flat end punch, or dowel rod

APPLICATION GUIDE

1. Measure the circumference of the tree in centimeters at chest height. Divide by 10.16 to determine the number of implants required.
2. Drill 3.2 cm deep holes every 10.6 centimeters spiraling up around the circumference of the tree.
3. After drilling the first hole, use a measuring instrument (i.e. flat end of a pen or pencil) as a depth gauge, insert completely into the hole and mark the depth by placing your thumb against the outer bark. Be sure to remove drill shavings from each hole. Repeat this procedure for every drilled hole.
4. Place the implant cartridge into the pre-drilled holes by simply pressing them into the tree trunk. Be sure to press the cartridges in as far as possible. Using a hammer and a flat end punch or dowel rod, carefully drive the cartridge into the tree, recessing the large end slightly beneath the cambium layer, which is just below the bark.



THE RIGHT TECHNOLOGY

Choosing the Right Technology **MAKES THE DIFFERENCE**

Nutrite searches the globe for innovative, proven and unique technologies to improve fertilizer performance and plant health. The availability of these highly effective ingredients allows for the development of fertilizer and amendment products that provide consistently great results.



UMAXX® is a premium stabilized nitrogen fertilizer designed to maximize nitrogen efficiency and minimize nitrogen loss. Stabilized Nitrogen remains in the root zone longer in a useable form, therefore, providing consistent growth and optimum results. When it comes to performance and return on investment, no other urea-based product compares to UMAXX® Stabilized Nitrogen. UMAXX® provides consistent colour response for up to 12 to 16 weeks.



Nutryon® polymer-coated urea provides a long-lasting, precise and consistent feeding for stronger and healthier turf. Nutryon® requires soil moisture and temperatures conducive to plant growth for release, making the nitrogen available only when usable by the turf.



Nutryon-S® slow release nitrogen provides turf nutrition that lasts up to 8 weeks. Nutryon-S® uses unique technology that supplies consistent feeding for better turf quality over an extended period.



Green and healthy turf all season long now possible with fewer applications! Designed to reduce the number of fertilizer applications and ideal for industrial, commercial or municipal turf, Nutryon Season Long provides up to six months of steady feeding from 90% control release nitrogen. Four longevities of polymer-coated nitrogen in specific proportion ensure a constant supply of nitrogen to the turf while minimizing nitrogen losses to the environment.



Contains up to five sources of nitrogen with different release rates: Fast, Medium and Slow. The slow-release nitrogen materials release over an extended (up to 12 - 16 weeks) period without promoting excessive leaf growth. These sources do not stimulate shoot growth to the extent that root growth is negatively affected. The gradual nitrogen release enhances the recuperative potential of turfgrass.



Sustâne® is made from aerobically composted turkey litter. Research has shown that Sustâne® stimulates soil microbial activity which is beneficial for turfgrass. Sustâne® provides predictable slow release organic nitrogen and is an excellent addition to any turf nutrition program.



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