



**Easy-To-Follow**

**Do-It-Yourself**

**4-Step Lawn Care Program**





# Easy-To-Follow 4-Step Lawn Care Program - Phosphate Free Lawn Food

## Step 1 - Crabgrass Control

Apply Clear Lake® Crabgrass Preventer 16-0-5 with Crab-Buster® early to mid-Spring, before the soil temperature reaches 60 degrees F or before the early germinating crabgrass reaches the 2-leaf stage.

It is a unique combination of lawn food and a pre-emergent and early post-emergent control of crabgrass providing up to 3-4 months of control of crabgrass and other annual broadleaf's and grasses.

## Step 2 - Weed Control

Apply Clear Lake® Weed & Feed 23-0-3 Mid-April - July when broadleaf weeds are actively growing. The TRIMEC® in Weed & Feed provides post-emergent control of dandelions as well as 200 other broadleaf weeds. It also supplies the key nutrients for a healthy, lush lawn. Apply to damp grass or sprinkle lightly before application. Do not water or mow for 48 hours after application.

## Step 3 - Lawn Food

Apply Clear Lake® Lawn Food 28-0-7 about April - September. This high-quality lawn food provides generous amounts of Nitrogen and Potassium as well as Sulfur and Iron needed for a vigorous, healthy lawn. Nitrogen is supplied in two ways: an immediate-release for fast greenup, and a slow release Nitrogen for extended feeding and long-lasting vitality

## Step 4 - Fall Fertilizer

Apply Clear Lake® Lawn Food 32-0-16 about April - September. This high-quality lawn food provides generous amounts of Nitrogen and Potassium as well as Sulfur and Iron needed for a vigorous, healthy lawn. Nitrogen is supplied in two ways: an immediate-release for fast greenup, and a slow release Nitrogen for extended feeding and long-lasting vitality.

M	A	M	J	J	A	S	O	N
A	P	A	J	J	A	S	O	N
R	R	R	U	U	U	E	T	O
C	I	I	N	N	G	P	O	V
H	L	L	E	E	U	T	B	E
					S	E	E	R
					T	M	R	
					B	B		
					E	E		
					R	R		

Note: Apply one step at a time. Wait at least 5 weeks before applying next step



# Spreader Calibration, Spreading Patterns & Calculating Lawn Area

## CALIBRATION INSTRUCTIONS:

To provide proper distribution, calibrate spreader before application.

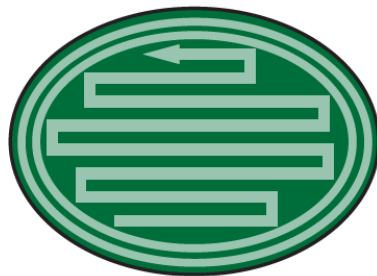
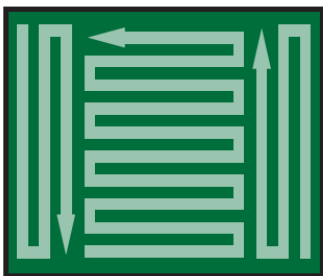
## IMPORTANT:

It is important to follow the directions as indicated on this quality lawn care product as over-application may cause injury to the lawn. Measure the size of the area to be treated and do not over or under apply. Spreader settings on the bags are approximate. Differences may occur due to condition of spreader, speed at which applied, and roughness of area treated. Calibrate spreader prior to use according to the manufacturer's directions. Check frequently to be sure equipment is working properly and distributing uniformly. Close spreader when filling, stopping or turning. Do not hand spread.

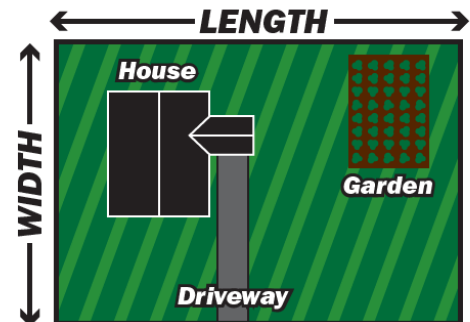


## Spreading Patterns

*First spread the borders of your lawn. Then spread the center by spreading in straight line passes. Spread at a uniform walking speed to insure even coverage.*



## Calculating Total Lawn Area



**LENGTH x WIDTH = TOTAL SQ. FT.**  
then subtract **NON-LAWN AREAS**  
(House, Garden, Driveway)



# Spreader Settings



ClearLake® fertilizer suggested spreader settings (to be used as a guideline only, actual application rate depends on age & condition of spreader).

## Broadcast Spreader

Ames 4-5

Ames Deluxe 2 in 1 3-4

Earthway 12-13

Plant Mate 8-9

Precision Red Devil

(old dial 0-12) 6-7

Precision Red Devil

(new dial 0-10) 3.75-4

Precision Pro 3.75-4

Scotts Speedy Green 4-5

Scotts Easy Green 27-2

## Drop Spreader

Ames 2.5-3

Ames Deluxe 2 in 1 2-3

Earthway 9-5-10

Plant Mate 1.5-2

Precision Red Devil

(old dial 0-14) 6-7

Precision Red Devil

(new dial 0-5) 1.5-2

Precision Pro 1.5-2

Scotts Accu Green 6.75-7

Please review bag for Square Footage Coverage applications

**Spreading Tips:** Spread border of lawn. Then apply product in uniform, parallel passes. Slight overlap may be needed. Shut off spreader anytime you stop or turn spreader around. Always apply with a properly calibrated rotary or drop type fertilizer spreader to distribute the granules evenly. Never apply by hand.

Spreaders not listed above, please contact the spreader manufacturer directly.



# Fertilizer Application

## How much lawn fertilizer should I apply?

The usual rule would be to apply about four pounds of nitrogen per 1000 sq. ft. per year, or 1 pound of actual nitrogen per application. Follow the labeled directions on the bag of fertilizer.

## When should fertilizer be applied?

Fertilizer should be applied four or more times per growing season. The first application should take place in early spring (about the time of the first mowing). After that, apply at six or eight week intervals depending on the fertilizer you are using.

## Can too much fertilizer be applied?

Definitely! Several things can happen when grass is over fertilized. The most obvious sign is a burning or browning of the grass; severe over fertilization may even kill the turf if it is too severe. Calibrating your fertilizer spreader will insure that you are applying the proper amount of fertilizer. Read and follow the direction on bag.

# Control Products

## BROADLEAF WEED CONTROL

### How do I kill broadleaf weeds in my lawn?

The best defense against weeds is a dense, healthy lawn. Once the grass is thick and uniform, it is difficult for weeds to take hold and grow. Grass that is weak or thin allows weeds to establish and compete for available sunlight, water and nutrients.

Here's a few easy tips that will help you get started:

- The best broadleaf weed control is obtained when weeds are young and actively growing.
  - The ideal time to apply a weed control product is on a warm but not too hot day after a few days of rainfall or watering. Weed & Feed products need to be applied to wet or moist turf so that the particles can stick to the weeds leaves. It should also be at least two days after your last mowing.
  - Finally, wait at least two days before mowing again so your yard can benefit fully from the application.
- Fall is the perfect time to get a jump on next year's weeds using a fall Weed & Feed will help your lawn look great next spring.

## CRABGRASS CONTROL

### How do keep crabgrass out of my lawn?

To control crabgrass in your lawn it is best to use a pre-emergent fertilizer that will prevent the crabgrass from germinating. One preemergence application of Dithiopyr on cool-season turf gives you season-long control. Multiple applications should be used on warm-season turf. Dithiopyr gives you timing flexibility to use an early postemergence application to control newly emerged crabgrass as well. A split application may be used to lengthen your crabgrass control. Using a pre-emergent application will control your crabgrass but will also prevent grass seed from germination so you need to take that into consideration before using.

## INSECT CONTROL

### How do I control ant, ticks & fleas in my lawn?

Using a granular insect control product will keep these nasty pests from causing damage to your lawn and to you. Apply anytime that you see insect damage or notice the insects.

### How do I control white grubs in my lawn?

To keep white grubs from causing damage to your lawn use a granular control product such and imidacloprid. Applied from early May through mid August depending on your location will give you season long control. White grubs can cause widespread damage to lawns by feeding on the roots causing it to turn yellow, then brown and die. Caution, don't use this product too early or too late, you will not get the control you are looking for.



# Lawns with a lawn watering - Automatic Underground Sprinkler System

## Divide By Zones

Different plants need different amounts of water. Divide your yard into separate irrigation zones so the grass can be watered separately and more frequently than groundcovers, shrubs and trees.

## Waste Not, Want Not

The greatest waste of water comes from applying too much, too often—much of it runs off and is never absorbed. Instead of watering for one long continuous session, try splitting the watering time into shorter periods and take 15-minute breaks in between each session. This will let the water soak in, while minimizing runoff.

## Watch The Clock

Water between 5 a.m. and 10 a.m.—when the sun is low, winds are calm and temperatures are cool. Midday watering tends to be less efficient because of water loss due to evaporation and windy conditions during the day. Watering in the evening isn't a good idea either because leaves can remain wet overnight—an open invitation for fungus to grow. By watering in the morning, you give the leaves a chance to dry out during the day.

## Adjust The System to the Season and Be Rain Smart

Adjust your irrigation system as the seasons and weather change. You can also install a shut-off device that automatically detects rain or moisture. These devices are inexpensive and let you take advantage of nature's free watering service.

## Water Only What Grows

If you have an underground sprinkler system, make sure the heads are adjusted properly to avoid watering sidewalks and driveways. A properly adjusted sprinkler head should spray large droplets of water, not a fine mist, to minimize evaporation and wind drift.

## Consider Drip

When it comes to watering individual trees, flowerbeds, potted containers or other non-grassy areas, you can apply water directly to the roots with low volume drip irrigation. This will reduce water waste through evaporation or runoff and keep weeds from growing.

## Do Routine Inspections

Periodically check your sprinklers to make sure everything is working properly. A clogged head or a torn line can wreak havoc on your landscape and water bill.

## Support

Chances are your professional contractor programmed the controller when they were finished installing the system. They probably also gave you a schedule (or schedules) you could enter into the controller during different seasons of the year. If not, you should contact an irrigation professional in your area who can give you guidance as to the number of minutes each zone should water, and on how many days of the week.



## Lawn Watering - Lawns Without Automatic Lawn Sprinkler System

### Should I water my lawn?

If there is not adequate rain fall you may need to water your lawn to keep it in good condition. The Midwest's climate, along with the natural ability of many turf grass plants to survive dry periods, often makes lawn watering optional. Low maintenance lawns typically are not watered. During spring and fall, natural precipitation is usually adequate to cause excellent growth and color. During summer when rainfall is often insufficient for plant growth, the lawn may turn brown and go dormant. Most grass plants, however, do not die and new growth begins with adequate rainfall. To promote vigorous growth and green color during dry periods watering is required. The average lawn with use about one inch of water per week depending on the time of the year and temperature.

### How much should I water the Lawn?

#### *Lawn Watering Guidelines - Without automatic Lawn Sprinkler System*

Water the lawn deeply and infrequently. Apply one inch of water at each watering. Water once a week or so during the summer. Any rainfall during the week should be considered and watering should be reduced accordingly.

Water your lawn less during cloudy and cool weather and more often when the weather is hot and windy. A lawn will use more water in hotter areas, or where there are tree roots near the surface.

Light and frequent watering promotes diseases and encourages shallow roots. A lawn with shallow roots is more subject to drought damage than a lawn with deep roots.

The amount and distribution of water from a sprinkling system can be measured by placing straight-sided cans at various locations on the lawn during a normal watering, and then measuring the depth of water in the cans.

### Watering for soil type

Proper watering methods will vary with soils. In heavy soils, slow heavy watering is essential (usually once a week). In sandy soils, frequent, lighter watering is the rule (maybe every day or two).

### Am I not watering my lawn enough?

To check if you are applying enough water, dig a hole with a trowel a couple hours after watering, the water should penetrate at least 8 inches.

Apply the water slowly enough that it does not run off. If you cannot change sprinkler heads, turn off the sprinklers for 30 minutes whenever runoff occurs and continue the cycle until enough water is applied. Aerating will improve water penetration.

### How frequently should I water a new lawn?

Where a lawn is newly established from seeding or sodding or is affected with patch disease symptoms, frequent watering is necessary to keep it alive.



## Mowing Heights

### At what height should I mow the lawn?

The mowing height of grass will change during the year. In early spring, grass may be kept shorter than when it gets very warm. A good rule is 2.5 inches from spring through mid-June. From mid-June to the end of August, 3 inches is recommended. After the first of September, take the height down by half an inch every two weeks until you have it at 1.5 inches going into winter.

Never cut off more than a third of the grass blade at mowing. Mowing the grass too short exposes the shaded lower stems to sunlight which causes them to burn and turn brown. If you mow your lawn higher it will use less water, look better and stay green longer.

Mowing at the right height and on the proper schedule helps maintain a dense, smooth, uniform turf and reduces the competitiveness of many weeds. Different grasses have different heights at which they grow best. Follow these guidelines for proper mowing:

#### **Suggested Mowing Heights:**

Bahiagrass: 2 to 3 inches  
Bentgrass: 3/8 to 3/4 inches  
Bermudagrass: 1/2 to 1 1/2 inches  
Bluegrass/Fescue Mix: 1 1/2 to 2 1/2 inches  
Blugrass/Ryegrass mix: 1 to 2 inches  
Carpetgrass: 1 to 2 inches  
Centipedegrass: 1 to 2 inches  
Fine Fescue Grass: 1 to 2 1/2 inches  
Kentucky Bluegrass: 1 to 2 1/2 inches  
Perennial Ryegrass: 1 to 2 inches  
St Augustine: 1 1/2 to 3 inches  
Tall Fescue: 3 to 4 inches  
Zoysia: 1/2 to 1 1/2 inches

## Grass Clippings

### What should I do with Grass Clippings?

If the lawn is healthy, it is not necessary to remove grass clippings, assuming the grass clippings are able to drop into the lawn. In fact, leaving the clippings has positive benefits because they gradually decompose, feeding the lawn. It is important to note that clippings do not contribute to thatch. If a lawn is maintained very short, or if the clippings sit on top of the grass, remove them to avoid smothering the grass.

## Mower Care

### Do I need to maintain my Lawn Mowing Equipment?

Sharpen your mower blades frequently so they do not tear the grass blades. Torn blades give the lawn a whitish cast. With any lawn mower, pay attention to routine sharpening, engine maintenance, and safety to add to its operations and to assure a better quality cut for your lawn.





## Controlling Thatch

### Does my lawn need Thatch Control?

Control measures should be based on an actual thatch problem--not just done routinely. Determine the need for thatch control by cutting a small pie-shaped, cross-section in the turf, lifting it, and examining the extent of thatch build-up. If the depth exceeds 1/2 inch, take steps to reduce it and prevent further accumulation.

### What can I do to Control Lawn Thatch?

There are a couple options. You can control thatch through lawn aeration (?) or by using a vertical mower, sometimes referred to as a power rake.

Aerification or vertical mowing is also an excellent way of preparing an old or damaged lawn for seeding (applying grass seed into the existing grass). Soil at the surface during seeding greatly improves germination of overseeded grasses.

### Vertical Mower

#### What is a Vertical Mower?

A vertical mower, sometimes called a power rake, can be used to remove thatch when a lawn has an excessive amount. A vertical mower has blades or tines that slice into the turf perpendicular to the soil surface.

#### How much lawn thatch should I remove?

The amount of thatch removed by vertical mowing depends on the depth to which the blades penetrate into the turf and soil, the weight of the machine, and the size of the power unit.

Depending on the vertical mower used and the amount of thatch to be removed, it may be necessary to go over the lawn several times for adequate thatch reduction. The large quantity of organic material brought to the surface during vertical mowing should be removed from the lawn.

#### When should I dethatch my lawn?

Since vertical mowing damages and thins many of the living plants, it is important to space vertical mowing so that there are at least 30 days of favorable temperature and moisture following the operation.

In the Upper Midwest, a late summer or early fall vertical mowing is preferable to minimize weed invasion. For quick recovery, the lawn should be fertilized shortly before and watered soon after vertical mowing.

#### What if I don't have any thatch control equipment?

Vertical mowers, as well as aerifiers, can frequently be rented from hardware stores, garden centers, or rental outlets.



## Aerification

### What is Aerification?

Aerification is an effective way to increase thatch decomposition and to reduce thatch build-up. Aerification allows water and oxygen to move into soils more quickly, creating a better environment for the thatch-decomposing organisms. As the soil cores brought to the surface in aerification gradually break down and work back into the thatch, its decomposition by micro-organisms increases.

An active earthworm population in the lawn is a preventative biological control. Since micro-organisms, fungi, insects, and earthworms are responsible for thatch decomposition, encourage them by maintaining a soil pH between 6 and 7, moist thatch and soil, and aerification.

Use soil insecticides for fungicides only when need to control specific, identified pest problems; pesticides can adversely affect the micro-organism, insect and earthworm populations.

### How do I aeriate my lawn?

Using an aerifier, a machine which removes plugs of soil from the lawn leaving holes about 1/2 inch in diameter and up to 3 inches deep. The cores of soil are typically left on the soil surface to gradually break down and filter back into the turf.

### What are the advantages to lawn aeration?

Aerification has several distinct advantages in a turf grass situation including:

- Relieving soil compaction
- Increasing water and oxygen infiltration into the soil
- Helping to control the development of thatch

Aerification is particularly helpful when the soil is compacted because of poor soil penetration before lawn establishment or from considerable foot traffic. Compacted soils result in shallow-rooted lawns particularly susceptible to disease, insect, and environmental stresses. This also causes ineffective watering as more water runs off the surface to low areas rather than flowing into the soil.

### When should I aeriate my lawn?

The best time to aeriate a lawn is in the cool weather of late summer (August 20 to September 20). By aerifying then, the lawn recovers quickly and is completely healed by winter.

