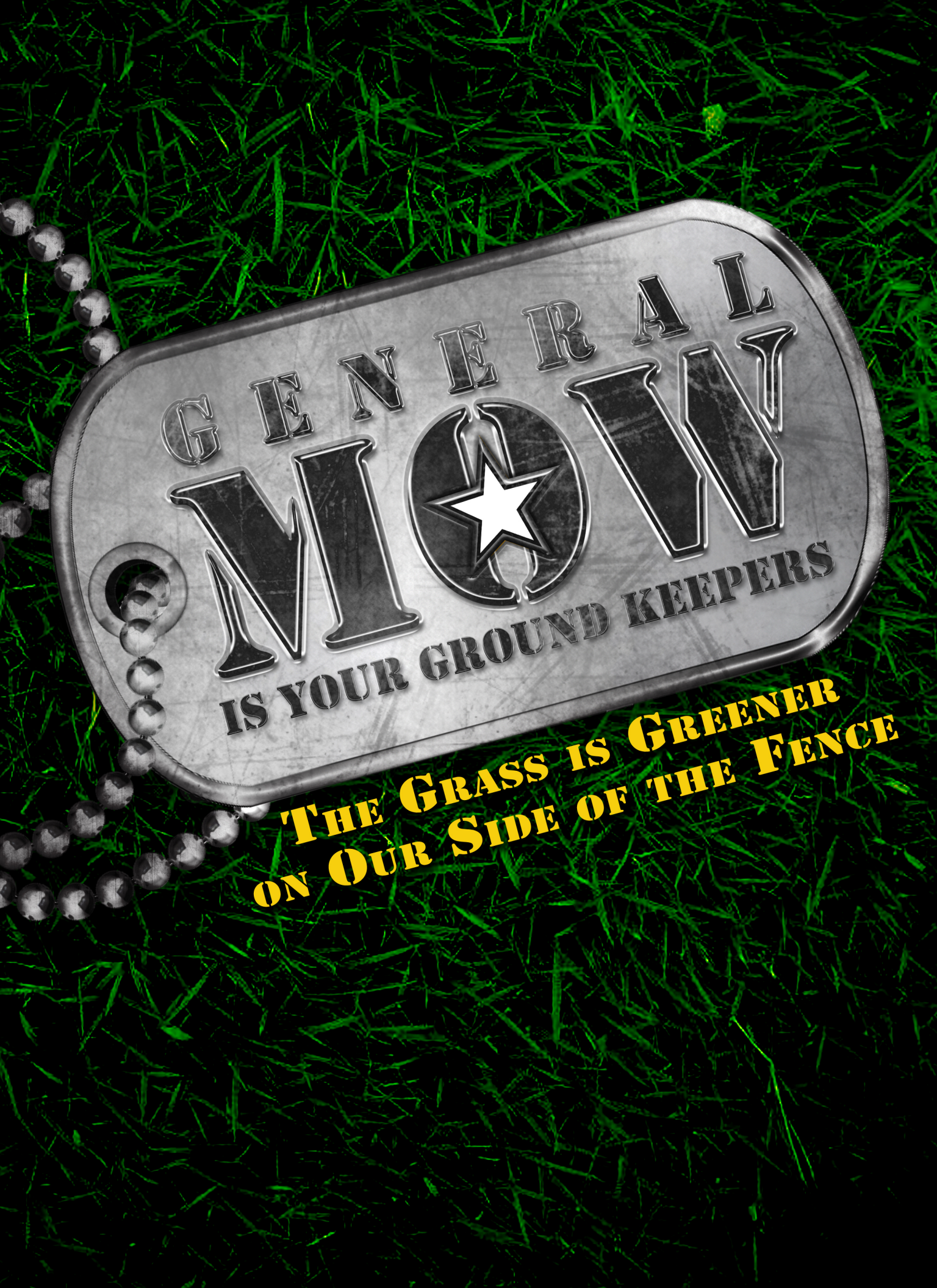
GENERAL
MOW
IS YOUR GROUND KEEPERS
The Grass is Greener
on Our Side of the Fence

Thank you for giving General Mow Ground Keepers the opportunity in presenting you with our history. We would love nothing more than to take this time to thank our exisitng clients and share with you the success they have brought us. We have been able to make our slogan, "The Grass is always Greener on our side of the fence" a reality, due to the great relationships we have with our clients. Thank you for making us who we are.

General Mow Ground Keepers

The Five Elements of Turf Management

August 13, 2010
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Maak Propagation & Reserach, Inc.
Miami, Florida 33018

Principles of Turf Management:

All sports fields and related facilities are designated to meet two basic requirements. 1. The field must be designated to accommodate the particular sports being played and 2. The field must provide a surface that allows the athlete to compete safely and at a reasonable level of competition. The good turf manager must provide a surface which is both safe and durable to withstand the stresses associated with both sports and non-sport activities on the field. A good turf comes from practicing effective turf grass cultural and management strategies.

In the following article we will consider the underlying principles of turfgrass management. The program described below is the template from which we work all of our athletic fields in the South Florida area. The principles are the same for every athletic field but the particulars change depending on weather and spcific situations which will arise when you are dealing with living organism such as turf, insects and fungi.

The Program is custom designed to provide a year round preventative and general maintenance program for a strong and healthy sports turf. The program combines a monthly general maintenance treatment which incorporates nutrition, pest & insect control, disease control and cultural management.

The Five Elements of Turf Management

1. Nutrition
2. Pest & Insect Control
3. Disease Control
4. Weed Management
5. Cultural Practices

1. Nutrition:

Few soils possess sufficient inherent fertility to maintain the desired turf quality and recuperative potential throughout the growing season. The primary objective of the nutrition treatment is to supply plant nutrients that are deficient in the soil in order to maintain the turf grass quality.

Fertility levels, particularly nitrogen, should be adjusted during the year based on whether the objective is to maintain the existing high quality (during the off-season) or to grow grass in order to improve quality and to recover from injury (in season use).

- 1- early spring (March) application of a combination fertilizer and herbicide
- 1- late fall (September) application of a combination fertilizer and herbicide
- 1- summer (June) Application of a granular fertilizer
- 6 applications of a nitrogen carrier (i.e. Ammonium Sulfate) to lower soil pH levels and stimulate growth
- The type of application or whether an application in December, January & February is necessary is determined based on the condition and use of the field at that particular moment

The Five Elements of Turf Management

2. **Pest & Insects:**

Turf grass injury caused by insects, nematodes and other small animals disrupt the uniformity of the turf. The primary emphasis in this component of the program is placed on preventative control to ensure that a dense, vigorous, actively growing turf has good recuperative potential.

- 2 brodcast application of a granular systemic pesticide/insecticide in March and September as a preventative and for the control of chinch bugs, mole crickets, grubs and ants

3. **Disease Control**

Turf diseases are those caused by fungi, bacteria, viruses' nematodes or parasitic higher plants. The Disease control program is designed to improve the vigor of the turf so that it is best able to resis, survive, and recover from any pathogen infection.

- 1 - application in summer for Root Rot prevention and management
- 1 - application in late fall for Brown Patch

4. **Weed Management (Turf)**

One of the most important components of turf grass quality is uniformity. The presence of weeds in the turf grass community detracts from turf grass uniformity and competes with the turf for ligt, soil, soil nutrients and carbon dioxide. Weed control practices are not effective on a long term basis unless the original cuase of weed encroachment is corrected. Thus, the avoidance and correction of turf grass weed problems involves a two-fold approach: weed prevention and weed control.

- Weed Prevention: 2 applications of a pre-emergent and post-emergent herbicide at the time of fertilization in March and June
- Weed Control: One multi-application of a systemic and selective post-emergent herbicide which will eliminate goose grass, sedge and crabgrass without damaging the existing Bermuda grass
- Weed Control: Spot treating any emerging weeds during regulary schedule maintenance visits with a selective post-emergent herbicide.

5. **Culture & Cultivation Management:**

Turf grass cultural management is the science and practice of establishing and maintaining turf grass for specialized purposes. These practices can be divided into the following major areas:

- Mowing, Trimming& Edging: The mowing of the turf is not included as part of our management program and is subcontracted out. Nonetheless, our recommendations that the basic minimums listed below are followed:
  - Proper mowing frequency which should include an average of two cuts per week during the growing season and a minimum of 1 cut per week during the dormant season (adjust as per existing conditions)
  - A medium cutting height of the turf be kept between .5 and .75 inch
  - Mechanical equipment should be kept sharp and in good condition
  - Clippings be incorporated into the turf

The Five Elements of Turf Management

- Irrigation: Irrigation of the fields is controlled by an automatic timer and pump system under the control of others. Nonetheless, our recommendations that the basic minimums listed below are followed:
  - Calculate the water use rate for the existing turf to determine the length and timing of the irrigation system during the growing season
  - Wilt prevention and control by ensuring an adequate supply of available soil moisture
  - Absolute control of the timing, length and uniformity of the irrigation systems operating hours and conditions.

- Weed Management (non-turf areas): Weed control and management in non-turf areas is very important to maintain a clean, healthy playing environement and preventing the spread of weeds from the non-playing areas to the turf. control of weeds on non-playing areas is usually done by chemical use of non-selective contact herbicides (glyphosate) through mechanical means 9back-packs).
  - The mix should include a nitrogen based fertilizer (Ammonium sulfate) to induce the opening of the stomata in the weeds and a surfactant / sticker to guarantee adherence and prevent run-off.
  - Application should be done as a reventative before seedlings emerge.
  - Minimum application of once per month is usually required in South Florida during the growing season.

- Aeration: Aeration or cultivation as used in turfgrass culture refers to the mechanical methods of selectively tilling an established turf without destroying the sod characteristics. Aeration improves soil water movement, alleviates soil compaction, encourages deeper roots, reduces weed emergence and increases shoot density
  - Spiking is a form of cultivation involving the shallow perforation of a turfgrass by use of solid tines to alleviate soil compaction and stimulate juvenile shoot and root formation.
    - Monthly spiking of the turf area in the off-season
    - Weekly spiking during the season
  - Slicing is a form of cultivation involving deep, vertical cutting action that provide soil openings and loosening.
    - Quarterly slicing of the turf area
  - Coring: Coring is a form of cultivation involving the use of a hollow tine or spoon to remove soil cores that leave a hole or cavity. Following removal of cores, the area is topdressed and silica sand is matted into the holes.
    - One core and topdress application per year to the turf area if it is determined that it is required.
  - Thatch Management: Thatch is an intermingled layer of living and dead grass stems, roots and other organic matter that is found between the soil surface and the grass blades. As a general rule, heavy thatch development signals an imbalance between the organic matter being produced and the rate of decomposition. Thatch management refers to the process of removing and controlling the layer of thatch present in the sports field

The Five Elements of Turf Management

Vertical mowing involves the use of a vertically operated rigid blade that cuts and pulls into the turf perpendicular to the soil surface and removes the accumulated thatch from the turf.

- One mechanical verti-cut application per year to the turf area if it is determined that it is required.
- Thatch level should be kept at approximately 1" for most combination football/soccer fields

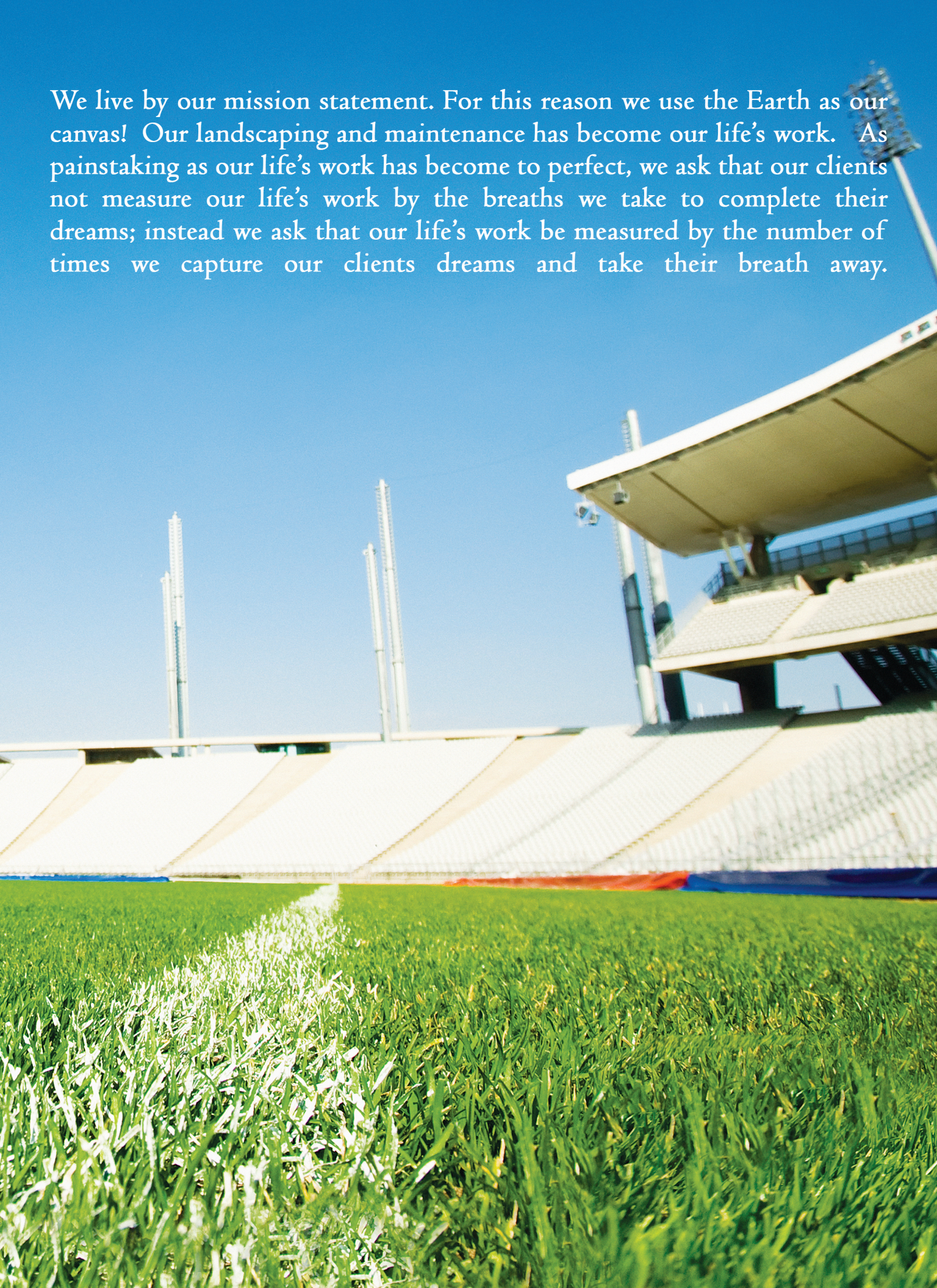
- Overseeding: Rye grass application to provide a green turf during the winter period to protect the Bermuda which is dormant from excessive wear and tear from the fall and winter sports activities.
  - In South Florida, rye applications can be eliminated on fields that are not being used or slightly used during the winter. Painting of the fields is one less costly alternative for fields being lightly used.
    - One application per year to the turf area.

- Traffic Control: Foot and vehicular traffic should be controlled through the use of the surrounding areas and kept to a minimum on the turf.

presented by
SPRAY MIAMI

The success of General Mow Ground Keepers comes down to our highly trained landscape professionals and corporate staff. We thrive on a corporate culture of discipline, pride, respect, and dedication to our customer service. That is what sets us apart from other landscape companies. "Our employees are the reason we continue to grow in this business. Our clients are the reason we succeed."

We live by our mission statement. For this reason we use the Earth as our canvas! Our landscaping and maintenance has become our life's work. As painstaking as our life's work has become to perfect, we ask that our clients not measure our life's work by the breaths we take to complete their dreams; instead we ask that our life's work be measured by the number of times we capture our clients dreams and take their breath away.



Vendor Partners

Green Thumb was founded in 1975. The business has grown from a 1000 sq. ft. store front in a shopping plaza to a 34,000 sq. ft. superstore on over 4 1/2 acres. Green Thumb is quite possible the largest facility of its type in the country. We've built our business on customer service and satisfaction.

What makes Kawasaki Engines start better, perform better and last longer? Simply put, it's the superiority of Kawasaki engineering, design and technology. That engineering excellence goes into everything we do, from powerful engines to versatile handheld power products.

In 1980 Art Evans made the first Dixie Chopper. Little did anyone know that he would lead the way to revolutionizing the entire lawn and garden industry. Dixie Choppers are known for their performance, productivity and reliability. Still family owned and operated, near Greencastle, Indiana. Dixie Chopper takes great pride in producing the best mid-mount, zero turning mowers in the industry.

Deere & Company, founded in 1837 (collectively called John Deere), has grown from a one-man blacksmith shop into a corporation that today does business around the world and employs more than 50,000 people. The company continues to be guided, as it has been since its beginning, by the core values exhibited by its founder: integrity, quality, commitment and innovation.

Municipal Partners

Hialeah Gardens

City of Hialeah

Town of Miami Lakes

Town of Cutler Bay

City of Palmetto Bay

City of Miami

City of Doral

City of Sweetwater

North Bay Village

Miami-Dade County

City of Miramar

Village of Pinecrest

Village of Biscayne Park

City of Boca raton

GENERAL
MOW
IS YOUR GROUND KEEPERS

"WHEN SAFETY IS OF THE HIGHEST PRIORITY, SUCCESS IS NO ACCIDENT"

- GENERAL MOW GROUND KEEPERS

Did you know that our employees need to use the following safety equipment in order to work for General Mow Ground Keepers:

- SPF CLOTHING
- EAR PLUGS
- GLASSES
- SPF HAT
- BOOTS
- GLOVES
- SUN SCREEN
- SAFETY VEST

All trucks are equipped with the following safety equipment:

- SAFETY MANUAL
- FIRST AID KIT
- GLOVES
- FIRE EXTINGUISHER
- SAFETY RECORDS & VEHICLE INSPECTIONS

General Mow Ground Keepers has developed a new truck that allows less wear and tear on the environment by eliminating all pull behind trailers. This diesel truck is a self contained green machine. The vehicles carry 6 persons in cab, stores 7 yards of trash, and side dumping while toting, all equipnment in sealed, box and fuel in stainless under carriage tanks. By turning our entire fleet into this system we were able to save our roads by eliminating trailers. We save 15 percent on diesel consumption. We save on expenses such as insurance, light, electrical, tags, registration, tires, rims, jacks, or dings. With all of these expenses being eliminated make us winners! General Mow Ground Keepers is paving a greener road for the world as a whole. We hope that our industry joins us in our green battle!

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